THIS WEEK'S National Petroleum NEWS

Index to Coming Meetings

Independent Oil Men's Association of New England: Fall River, Mass., Aug. 14; Providence, R. I., Sept. 11; Worcester, Mass., Oct. 9.

American Petroleum Institute division of development and production engineering, Texas-Louisiana-Arkansas district, Galvez Hotel, Galveston, Tex., Sept. 5, 6.

American Chemical Society, Petroleum Division, Minneapolis, Minn., beginning Sept. 9.

National Petroleum Association, Hotel Traymore, Atlantic City, N. J., Sept. 18, 19, 20.

Ohio Petroleum Marketers Association, Deshler-Wallick Hotel, Columbus, O., Sept. 18, 19.

Rocky Mountain Oil & Gas Association, Montana division, Calgary, Alta., Sept. 18, 19, 20.

National Safety Council, Petroleum Section, Congress Hotel, Chicago, Sept. 30, to Oct. 5.

National Association of Credit Men, Refinery Credit Managers to meet, Mayo Hotel, Tulsa, Oct. 3, 4.

Texas Petroleum Marketers Association, Plaza Hotel, San Antonio, Oct. 3, 4, 5.

International Petroleum Congress, Tulsa, Oct. 5.

American Petroleum Institute, Division of Development and Production Engineering, Tulsa, Oct. 7, 8. (To meet during Tulsa Expo.)

Pennsylvania Independent Oil Men's Association, William Penn Hotel, Pittsburgh, Pa., Oct. 15, 16.

Big Four State Jobbers (Kansas, Missouri, Nebraska and Iowa), Kansas City, Mo., Oct. 15, 16, 17.

Independent Oil Men of America, Stevens Hotel, Chicago, Oct. 21, 22, 23.

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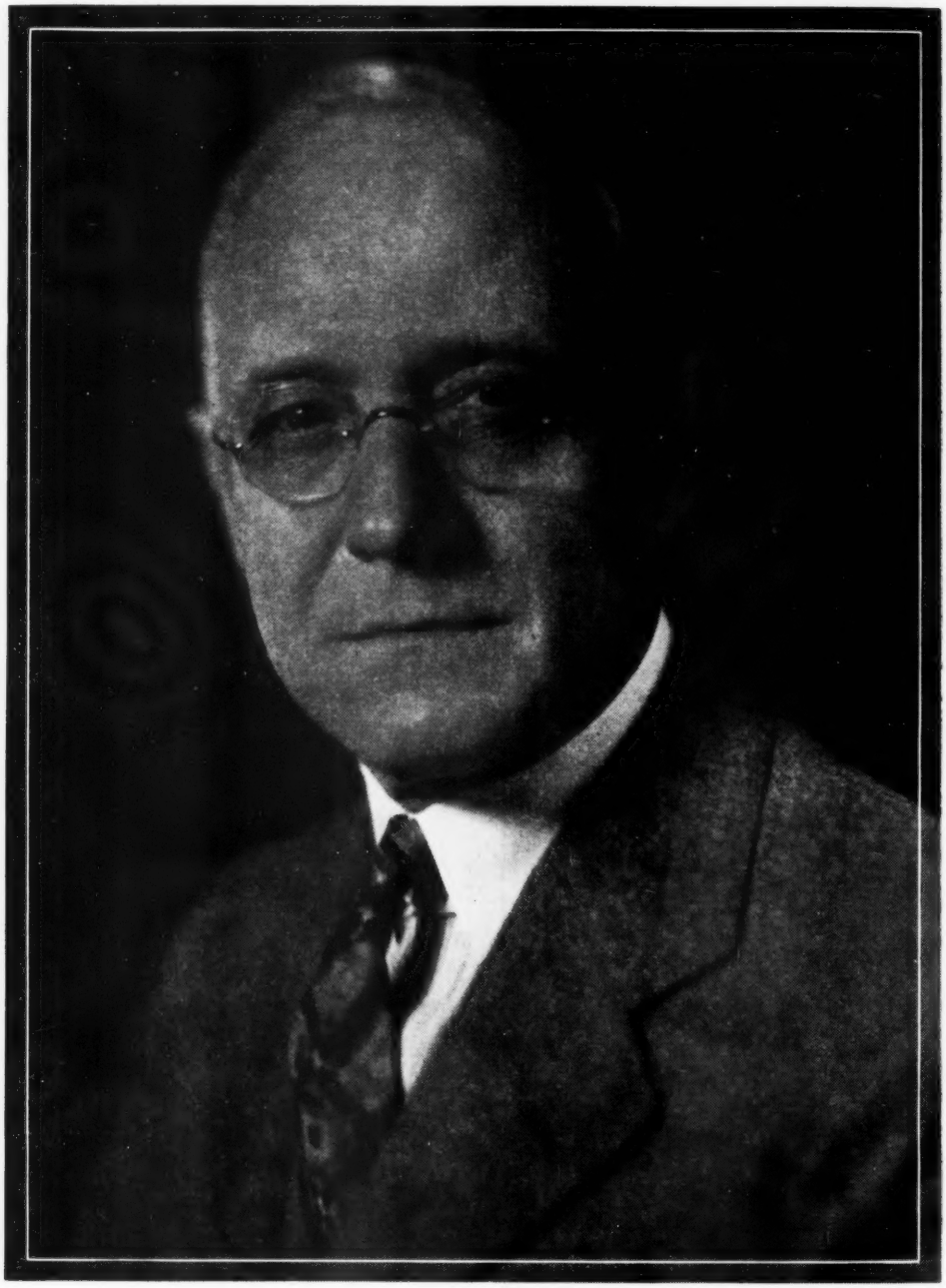

—Photo by Blank-Stoller, Inc.

WALLACE COLLIN FRANKLIN, vice-president and general counsel of the Tidal Oil Co. and affiliated companies, has been prominently identified with the various efforts made in the past three years to stabilize oil industry conditions. A director of the American Petroleum Institute, he served as chairman of the interior regional committee this spring when the A. P. I. leaders drew up a plan to hold production at a level where the uneconomic storing of oil would be avoided.

Mr. Franklin was born in Crittenden county, Ky., which is in the "pennyrile" district. He attended a teacher's college at Bowling Green, taught country schools. In 1900 he went to Washington as clerk of the Bureau of Census office and worked at that for two years. Three years were spent as law clerk in the office of the Secretary of the Interior. During this five years Mr. Franklin was attending night law classes at George Washington University.

In 1905 he came to Muskogee, Okla., as law clerk to the Five Civilized Tribes Commission and two years later he set up in law practice in that town. He came to Tulsa in 1917 in the legal department of the Tidal and in 1922 became vice-president and general counsel. He is a director of the Exchange National Bank and the Darby Petroleum Co., director of the American Petroleum Institute and vice-president of the Mid-Continent Oil & Gas Association.

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Net Profits of 70 Companies in 1928 Double 1927 Earnings

By Roger B. Stafford
N. P. N. STAFF WRITER

CLEVELAND, Aug. 10

THE sum of the net profits of 70 American oil and oil transportation companies in 1928, was almost double the net profits of the same group in 1927. The actual gain was $298,305,208, or 97.52 per cent.

The total net profits in 1928 were $604,192,616 or 8.14 per cent on the total invested capital of the 70 companies which was $7,418,557,084 at the end of 1928. In *invested capital* are included capital stock, reinvested surplus and funded or other long term indebtedness.

In 1927 the 70 companies netted $305,887,408 on $7,129,436,197 of total capital, or 4.29 per cent.

These 70 companies Dec. 31, 1928, had assets that totaled almost $8,600,000,000 after deduction of depreciation, depletion and amortization reserves, and represented approximately two-thirds of the investment in the oil industry in this country. In the group are included almost all the large Independent and Standard companies. The Cities Service group of oil companies is the largest group now included because Cities Service does not segregate its oil and utilities companies in its annual reports.

The total assets of the 70 companies showed a growth of $696,195,253 or 8.8 per cent last year but the capital investment showed an increase of only $289,120,887 or 4.05 per cent. This probably is because some of the increase in the assets was represented on the credit side of the ledger by current or short term liabilities.

Fixed assets increased $222,217,661, after deduction of reserves, to $4,902,398,032, a gain of 4.74 per cent during 1928. Depreciation, depletion and amortization reserves were increased $395,073,765 or 15.19 per cent to $2,995,111,849.

Permanent investments, mostly stocks in and advances to affiliated companies increased $41,913,085 to $678,174,969. The increase was 6.58 per cent.

The ratio of current assets to current liabilities continued at approximately 5 to 1. Current assets increased 12.28 per cent and current liabilities 13.35 per cent. Net working capital Dec. 31 was $291,605,768 or 15.25 per cent larger than a year before.

Of the $300,275,267 increase in current assets during the year, $192,409,103 was in cash and marketable securities, the total of which item Dec. 31, 1928, was $834,220,795. Inventories, almost wholly oil, amounted to $1,184,085,688 at the end of 1928. This sum was $71,760,280 or 6.45 per cent more than the inventories at the end of 1927.

The capital stock item of the 70 companies was increased $128,334,926 or 3.1 per cent and surplus after dividends for the year amounted to $229,120,887 or a gain of 10.97 per cent. This is the sum that was reinvested in the business or used for working capital.

FUNDED or long term indebtedness of the 70 companies was reduced $68,330,043 or 7.57 per cent to $833,900,568. Assuming that the average interest on the funded or long term indebtedness was 6 per cent the 70 companies' net profits were more than 12 times the interest requirements last year.

Two companies of the Standard group were again leaders in rate of earnings. The Vacuum Oil Co. netted 23 per cent on its total invested capital of $7.46 per $25 share as compared with 17.7 per cent and $10.17 per share in 1927. Vacuum has approximately double the number of shares outstanding in 1928 over 1927 because of a 100 per cent stock dividend in 1928.

Chesebrough Mfg. Co. netted 26.8 per cent on its total investment or $10.58 per $25 share. In 1927 it netted 23.6 per cent on the total and $8.49 a share.

(*Continued on Page* 30)

Assets of 70 Companies Increase 8.8%

INCREASES in earnings and of various items in the accounts of 70 oil and oil transportation companies in 1928 over 1927 were as follows:

	Increase	Per Cent
Operating income	$319,343,922	40.56
Net profits	298,305,208	97.52
Total assets	696,195,253	8.80
Fixed assets	222,217,661	4.74
Depreciation, depletion	395,073,765	15.19
Permanent investments	41,913,085	6.58
Cash, marketable securities	192,409,103	29.98
Oil inventories	71,760,280	6.45
Total current assets	300,275,267	12.28
Total current liabilities	64,014,367	13.35
Net working capital	291,605,768	15.25
Capital stock	128,334,926	3.10
Funded or deferred debt	*68,330,043	*7.57
Surplus	229,116,004	10.97
Total capital invested	289,120,887	4.05

*Decrease

Comparative Income Reports, Assets, Reserves, Current

(Balance Sheet Items as of Dec. 31)

Company	Year	Net Operating Income	Net Profits	Net Per Common Share	Percent of Profit on Total Invested Capital	Total Assets After Reserves	Fixed Assets After Reserves	Depreciation, Depletion & Amort., Res.	Permanent Investments
Amerada Corp	1928	$5,950,112	$2,214,110	$2.40	10.4	$22,623,697	$15,443,730	$21,014,845	$ 574,668
do	1927	9,707,842	3,706,715	4.02	18.2	22,455,958	15,616,424	18,353,728	390,000
American Republic Corp.	1928	105,590	105,590	1.05	0.2	72,856,596	39,308,138	11,513,807	15,545,051
do	1927	d146,197	d146,197	0	0	77,762,317	39,169,097	9,729,771	14,107,027
Atlantic Refg. Co.	1928	31,879,924	16,848,807	7.72	12.8	155,704,520	87,966,334	54,866,137	5,447,050
do	1927	16,198,197	3,298,872	1.83	2.8	138,885,847	73,042,068	52,243,016	10,344,681
Barnsdall Corp.	1928	12,140,277	4,039,861	3.13	5.5	75,387,227	53,665,279	25,044,217	943,499
do	1927	11,457,150	4,229,796	3.61	6.0	78,159,076	66,269,115	23,317,654	1,017,427
Beacon Oil Co.	1928	3,092,439	1,209,815	1.09	4.1	33,354,587	18,445,496	a	4,968,928
do	1927	730,234	345,476	0.18	1.2	32,499,556	17,512,533	a	5,369,326
Borne Scrymser Co.	1928	a	b101,661	2.54	6.6	1,652,976	459,372	264,671	510,800
do	1927	a	b114,307	2.86	7.4	1,643,713	479,852	235,032	511,653
Buckeye Pipe Line	1928	a	1,207,030	6.03	9.2	15,905,522	9,381,726	11,346,202	.....
do	1927	a	981,036	4.90	7.4	15,365,420	9,104,035	10,797,932	.....
Chesebrough Mfg. Co.	1928	a	1,269,628	10.58	26.8	6,702,726	1,643,715	a	.....
do	1927	a	1,018,516	8.49	23.6	6,102,178	1,629,856	a	.....
Continental Oil Co.	1928	11,649,166	3,347,691	0.92	4.2	84,297,004	57,147,701	65,802,699	2,535,747
do	1927	8,649,138	d135,129	0	0	81,595,532	57,222,640	59,915,637	2,470,745
Crystal Oil Refg. Corp.	1928	622,342	274,961	1.83	6.6	4,759,963	2,882,137	602,126	239,205
do	1927	353,068	59,995	0.39	1.8	4,201,299	3,054,033	372,000	.....
General Asphalt Co.	1928	2,099,543	920,507	2.78	2.0	47,008,134	37,443,993	a	130,283
do	1927	2,501,326	1,329,174	4.73	2.9	47,781,297	37,414,476	a	37,482
Gulf Oil Corp.	1928	113,830,569	36,325,140	8.07	10.0	381,734,018	232,234,984	232,406,713	13,211,821
do	1927	90,721,869	13,707,628	3.08	4.2	347,241,101	224,223,153	205,592,929	5,996,051
Honolulu Cons. Oil Co.	1928	3,569,388	2,351,349	2.49	4.6	51,023,090	45,215,775	20,421,841	508,300
do	1927	4,127,357	3,163,495	3.35	6.0	53,137,896	46,708,933	18,418,865	408,300
Houston Oil Co.	1928	4,962,937	1,812,518	5.11	3.4	53,025,942	42,265,098	9,490,504	.....
do	1927	5,633,538	2,429,331	7.57	4.9	52,742,369	42,640,791	7,450,311	1,000,000
Humble Oil & Refg. Co.	1928	51,097,042	19,277,145	6.50	10.6	206,332,601	131,004,949	86,813,854	75,172
do	1927	33,777,066	7,111,738	2.41	3.9	189,854,921	128,677,682	125,120,133	73,172
Illinois Pipe Line Co.	1928	a	b4,336,387	21.68	14.9	30,051,116	23,181,663	14,258,654	2,171,292
do	1927	a	b3,812,827	19.06	13.7	29,097,792	21,394,633	12,774,376	3,071,220
Independent Oil & Gas Co.	1928	13,757,780	5,092,858	5.29	11.6	46,610,015	29,596,433	15,364,894	3,007
do	1927	6,049,236	2,313,432	4.62	8.3	31,207,181	25,592,132	8,006,383	10,000
Indian Refg. Co.	1928	1,769,617	651,892	0.53	2.6	23,519,922	15,890,470	5,637,544	14,617
do	1927	798,838	6,092	0	0	21,371,747	15,845,362	3,896,846	13,561
Lion Oil Refg. Co.	1928	1,205,130	501,339	2.00	7.0	7,875,936	5,378,667	5,072,739	38,868
do	1927	1,410,411	450,975	2.25	7.2	6,885,379	5,116,674	4,348,055	33,768
Louisiana Oil Refg. Co.	1928	3,830,914	1,535,316	1.07	8.7	22,979,753	18,097,090	8,179,992	78,183
do	1927	2,075,903	188,622	4.71	1.2	16,162,344	18,539,186	6,675,504	28,283
Marland Oil Co.	1928	12,473,479	d4,987,565	0	0	104,903,599	49,903,807	53,875,130	12,688,372
do	1927	12,603,222	d4,896,149	0	0	116,355,515	57,256,621	46,037,792	14,075,048
Mid-Continent Pet. Corp.	1928	11,919,538	3,897,056	2.45	4.7	81,477,273	58,972,693	42,273,047	461,686
do	1927	11,188,983	3,298,575	2.33	4.0	84,200,784	61,711,996	a	464,686
Mountain & Gulf Oil Co.	1928	645,023	h645,023	.17	8.3	8,180,741	6,499,847	5,639,401	.....
do	1927	711,126	d9,298	0	0	9,842,116	6,564,457	5,518,205	.....
Mountain Producers Corp.	1928	3,155,811	bd196,597	0	0	30,753,093	21,205,648	26,958,208	232,200
do	1927	3,391,987	b285,555	.01	0.8	34,970,512	23,431,364	23,966,417	207,500
National Transit Co.	1928	a	1,189,685	2.33	12.7	13,473,343	3,640,769	9,259,943	6,016,403
do	1927	a	630,622	1.23	5.0	16,306,448	3,994,912	8,001,653	8,482,322
New York Transit Co.	1928	a	d1,549,412	0	0	6,618,243	2,056,137	655,868	.....
do	1927	a	d69,433	0	0	6,861,934	3,880,739	2,301,288	.....
North Central Texas Oil Co.	1928	422,083	38,161	.74	1.1	3,429,028	2,095,886	a	.....
do	1927	351,712	34,843	.72	1.5	2,334,623	2,106,210	a	.....
Northern Pipe Line Co.	1928	a	399,632	9.99	18.0	2,992,033	1,231,188	1,926,892	831,177
do	1927	a	339,140	8.48	8.6	4,932,119	1,257,005	1,838,376	3,358,030
Ohio Oil Co.	1928	.....	5,054,956	2.09	5.0	104,206,107	36,556,120	a	29,169,223
do	1927	.....	7,314,572	1.46	7.3	104,454,747	35,603,551	a	27,980,779
Pan Amer. Pet. & Trans. Co.	1928	26,982,743	10,071,576	3.00	4.3	256,299,975	183,853,756	114,476,792	13,065,482
do	1927	23,437,761	16,909,040	5.03	7.1	251,164,921	105,971,761	89,273,267	86,686,021
Panhandle Prod. & Refg. Co.	1928	1,176,278	84,281	3.19	1.6	7,028,163	5,505,491	7,239,391	72,681
do	1927	1,037,860	d19,090	0	0	7,522,445	5,991,151	6,263,633	242,704
Paragon Refg. Co.	1928	1,203,989	654,675	.41	9.0	8,880,319	5,138,128	3,022,148	18,997
do	1927	484,124	311,827	.03	2.3	6,322,898	3,925,495	a	.....
Pennok Oil Corp.	1928	137,779	d29,792	0	0	723,644	359,830	2,028,069	84,861
do	1927	177,379	d6,372	0	0	749,944	519,193	1,876,386	51,017
Phillips Pet. Co.	1928	22,436,474	5,960,171	2.48	4.8	129,256,345	95,753,068	69,020,863	1,407,561
do	1927	28,456,602	4,937,931	2.06	3.5	163,490,100	110,721,721	58,376,691	557,901
Prairie Oil & Gas	1928	19,312,763	10,537,431	4.34	6.5	180,066,070	47,703,597	78,915,743	21,171,361
do	1927	.....	2,679,223	.98	1.8	186,323,925	50,297,500	a	.....
Producers & Refiners Corp.	1928	4,686,703	934,484	.98	4.7	35,613,473	19,831,421	21,650,944	11,765,604
do	1927	2,091,311	a3,044,304	0	0	56,305,138	49,376,529	9,076,367	1,949,856
Pure Oil Co.	1928	i22,510,254	11,224,081	3.05	5.9	195,511,767	155,290,135	52,049,524	5,695,908
do	1927	i14,208,307	4,836,529	.97	2.6	188,828,160	153,866,195	48,419,375	4,277,574
Red Bank Oil Co.	1928	101,535	h63,881	.29	1.0	6,369,414	5,523,129	1,697,894	.....
do	1927	200,061	h187,735	.84	3.2	6,281,395	5,836,700	1,874,139	.....
Reiter & Foster Oil Corp.	1928	608,090	415,532	1.10	9.1	4,540,256	3,609,829	269,087	123,517
do	1927	a	11,688	.003	0.2	5,455,944	4,573,465	.....	123,517
Richfield Oil Co.	1928	13,225,221	7,818,076	3.80	10.1	83,977,855	58,264,492	.....	10,757,373
do	1927	7,519,889	3,742,884	3.07	7.0	59,834,920	48,754,245	a	317,860
Rio Grande Oil Co.	1928	2,693,794	1,649,600	1.37	4.0	42,589,946	39,379,651	3,015,913	295,387
do	1927	671,263	225,423	1.86	2.7	9,377,832	6,702,940	2,219,316	550,802
Salt Creek Cons'd.	1928	656,339	656,339	.51	4.1	16,763,341	15,917,595	11,711,371	.....
do	1927	767,743	bd248,894	0	0	15,819,525	14,880,703	12,697,175	.....
Salt Creek Prod. Assn.	1928	3,624,762	3,326,429	2.22	10.3	32,992,723	19,941,125	a	290,674
do	1927	3,321,385	126,812	.08	0.3	37,817,242	22,841,832	27,097,060	269,660
Shell Union Oil Co.	1928	68,538,816	20,395,021	2.04	7.0	496,494,202	271,932,460	139,588,203	5,020,952
do	1927	46,798,724	11,344,915	1.09	3.6	348,129,213	246,305,967	108,684,271	3,834,864
Simms Pet. Co.	1928	3,945,265	334,064	.41	2.0	18,204,102	11,826,255	13,535,062	555,459
do	1927	2,590,081	d61,369	0	0	19,195,059	12,944,099	12,321,094	552,808
Sinclair Cons'd Oil Corp.	1928	40,150,453	13,447,347	2.70	3.6	401,958,100	234,024,540	144,680,647	63,692,490
do	1927	31,734,825	11,344,915	.89	1.5	367,379,079	242,243,444	128,758,786	61,674,095
Skelly Oil Co.	1928	11,171,201	4,104,377	3.76	7.8	85,799,821	74,657,756	30,874,926	3,170,700
do	1927	7,841,729	1,438,228	1.31	2.8	80,736,625	68,832,079	29,779,910	2,500,541

Position, Working and Invested Capital of 70 Companies

(Explanatory Text in Accompanying Article)

Cash & Marketable Securities	Refined & Crude Oil Inventories	Total Current Assets	Total Current Liabilities	Net Indicated Working Capital	Capital Stock	Funded or Deferred Debt	Surplus	Year	Company
$3,435,347	$1,324,961	$6,270,243	$1,228,611	$5,041,632	$13,581,375	$ 29,147	$7,516,795	1928	.....Amerada Corp.
2,906,762	1,579,152	6,074,899	1,785,758	4,289,141	13,581,375	66,700	6,685,798	1927	..... do
7,255,298	e5,112,013	14,871,745	6,315,683	8,556,062	30,812,000	8,154,000	11,690,706	1928	American Republic Corp.
6,934,381	5,477,332	23,487,217	4,955,916	18,531,301	30,822,000	14,482,000	12,738,536	1927	..... do
7,688,018	32,953,555	60,339,738	10,607,009	49,732,729	70,000,000	14,431,600	46,598,983	1928	.....Atlantic Refg. Co.
3,886,470	29,820,197	53,270,146	9,253,520	44,016,626	70,000,000	14,456,000	33,084,248	1927	..... do
3,431,889	3,497,760	10,278,678	1,541,803	8,736,875	45,135,650	21,537,627	6,258,932	1928	.....Barnsdall Corp.
1,974,129	5,652,259	10,302,498	7,610,372	2,692,126	29,520,850	25,620,280	14,401,409	1927	..... do
2,811,272	2,941,859	7,806,849	4,354,471	3,452,378	14,972,525	6,929,959	7,095,906	1928	.....Beacon Oil Co.
2,045,517	3,284,365	7,121,119	3,835,405	3,285,714	14,626,856	7,922,826	6,095,619	1927	..... do
143,681	444,812	682,237	59,360	622,877	1,000,000	.....	524,925	1928	.....Borne Scrymser Co.
104,346	414,290	651,438	28,017	623,421	1,000,000	.....	543,244	1927	..... do
4,003,117	.....	4,593,344	797,727	3,795,617	10,000,000	0	3,026,783	1928	....Buckeye Pipe Line Co.
4,883,153	.....	6,082,295	327,297	5,754,998	10,000,000	0	3,169,754	1927	..... do
g3,441,038	e1,271,940	5,070,144	167,435	4,902,709	3,000,000	0	1,720,523	1928	...Chesebrough Mfg. Co.
g2,589,724	e1,517,175	4,377,580	113,425	4,264,155	3,000,000	0	1,318,977	1927	..... do
6,594,262	10,228,244	22,862,085	3,955,570	18,906,515	36,452,420	12,792,900	29,856,440	1928	.....Continental Oil Co.
5,946,283	8,308,163	20,003,228	3,174,830	16,828,398	36,123,350	14,016,500	27,039,377	1927	..... do
99,075	680,060	1,339,203	529,218	809,985	2,584,710	291,000	c1,234,091	1928	....Crystal Oil Refg. Corp.
215,094	269,410	853,382	270,696	582,686	2,584,710	374,000	c965,234	1927	..... do
1,686,641	e3,488,161	7,078,015	1,104,295	5,973,720	31,000,000	4,569,400	8,886,828	1928	.....General Asphalt Co.
1,487,267	e4,923,404	7,882,015	1,198,507	6,683,508	31,000,000	4,752,700	9,520,462	1927	..... do
27,946,372	63,829,897	131,556,718	16,572,883	114,983,835	112,623,025	65,904,000	c181,279,892	1928	.....Gulf Oil Corp.
18,755,583	54,602,139	111,786,438	16,937,137	94,849,301	111,252,900	69,904,000	c143,146,363	1927	..... do
4,228,831	65,376	5,208,104	290,872	4,917,232	9,449,000	.....	c40,933,147	1928	Honolulu Cons. Oil Co.
4,976,987	0	5,920,800	372,681	5,548,119	9,449,000	.....	c42,899,970	1927	..... do
1,923,677	483,159	3,794,095	1,044,817	2,794,278	33,916,200	8,000,000	9,879,926	1928	.....Houston Oil Co.
795,471	167,023	2,304,916	3,564,317	.....	33,916,200	6,011,000	9,169,966	1927	..... do
25,140,743	31,480,413	72,703,773	14,361,689	58,342,084	74,103,300	47,197,000	60,361,295	1928	...Humble Oil & Refg. Co.
12,380,584	32,752,898	58,892,358	11,533,246	47,359,112	73,685,700	49,239,000	55,391,070	1927	..... do
a	a	3,198,780	136,331	3,062,449	20,000,000	0	8,955,957	1928	...Illinois Pipe Line Co.
a	a	4,081,913	213,054	3,868,859	20,000,000	0	7,819,571	1927	..... do
8,599,823	3,788,484	15,857,328	2,714,917	13,142,411	29,875,779	8,009,840	6,007,208	1928	...Indep. Oil & Gas Co.
662,242	2,394,812	4,730,370	3,459,451	1,270,918	9,534,861	6,256,638	11,955,231	1927	..... do
2,302,544	f2,501,577	6,296,303	1,364,585	4,931,718	12,322,670	2,447,772	10,023,383	1928	.....Indian Refg. Co.
372,140	f2,253,241	4,143,887	1,976,573	2,167,314	10,147,080	4,084,091	5,061,463	1927	..... do
651,113	1,052,733	2,432,378	718,138	1,714,240	f7,093,747	64,051	.....	1928	....Lion Oil Refg. Co.
173,460	1,082,652	1,706,013	697,241	1,008,772	f5,662,477	525,662	.....	1927	..... do
499,354	1,344,543	4,166,505	1,320,685	2,845,820	9,619,095	488,725	7,471,575	1928	....Louisiana Oil Refg. Co.
170,212	1,295,029	3,464,418	1,548,337	1,916,081	8,969,095	1,099,076	6,247,922	1927	..... do
21,936,271	8,405,147	39,307,780	4,196,711	35,111,069	f78,748,447	21,467,000	.....	1928	.....Marland Oil Co.
18,285,747	13,201,996	42,031,278	2,566,135	39,465,143	f83,718,106	30,000,000	.....	1927	..... do
8,007,938	8,906,236	21,546,190	2,831,173	18,715,017	55,261,652	704,573	26,758,077	1928	....Mid-Cont. Pet. Corp.
7,325,825	8,222,455	20,341,344	2,230,017	18,111,327	48,790,665	9,893,000	22,861,021	1927	..... do
918,485	e264,490	1,407,372	107,178	1,300,194	3,705,200	0	4,045,261	1928	Mountain & Gulf Oil Co.
2,514,713	e238,084	3,002,505	241,712	2,760,793	3,705,200	0	5,681,055	1927	..... do
3,673,773	5,244,422	9,466,407	1,348,144	8,118,263	16,821,820	0	12,286,744	1928	Mountain Producers Corp.
5,509,451	5,137,527	11,239,760	1,181,691	10,058,069	16,821,820	0	16,626,721	1927	..... do
777,693	e3,064,410	3,731,747	303,497	3,228,250	6,362,500	0	2,992,648	1928	.....Nat'l. Transit Co.
945,223	e2,913,395	3,792,574	147,831	3,644,743	6,363,350	0	6,133,350	1927	..... do
2,149,107	a	3,620,529	142,845	3,477,684	5,000,000	0	d835,773	1928	....New York Transit Co.
2,867,344	a	2,952,898	87,077	2,865,821	5,000,000	0	1,274,140	1927	..... do
1,130,408	a	1,170,047	25,094	1,144,953	3,031,440	16,250	342,030	1928	The N. Cent. Texas Oil Co.
147,982	a	186,284	5,241	181,043	1,994,900	0	308,159	1927	..... do
237,796	a	324,476	143,059	181,417	2,000,000	0	211,525	1928	Northern Pipe Line Co.
126,871	a	286,013	256,099	29,914	4,000,000	0	203,913	1927	..... do
917,498	e30,802,811	37,106,654	3,011,607	34,095,047	60,000,000	.....	40,661,818	1928	.....Ohio Oil Co.
374,170	e34,243,489	38,321,760	3,370,585	34,951,175	60,000,000	.....	40,494,884	1927	..... do
9,460,922	24,240,808	46,297,712	20,365,882	25,931,830	168,032,489	9,994,974	52,051,073	1928	Pan Amer. Pet. & Trans. Co.
12,573,928	15,199,201	42,072,710	16,078,379	25,994,331	169,289,404	12,440,400	53,356,738	1927	..... do
148,895	356,928	1,282,299	738,025	544,274	4,785,147	0	263,660	1928	Panh'dle Prod. & Refg. Co.
113,537	450,485	1,238,299	693,970	544,329	5,401,653	0	326,211	1927	..... do
143,723	e1,238,354	2,239,065	1,426,005	813,060	3,765,800	928,186	2,541,432	1928	.....Paragon Refg. Co.
55,491	e935,646	1,365,932	522,776	843,156	9,375,300	.....	d3,754,948	1927	..... do
181,036	67,502	278,619	48,955	229,664	f621,610	.....	.....	1928	.....Pennok Oil Corp.
73,321	71,532	178,989	54,953	124,036	f651,402	.....	.....	1927	..... do
12,487,064	9,374,115	30,173,699	6,600,623	23,573,076	57,308,637	35,447,000	29,409,738	1928	.....Phillips Pet. Co.
16,257,394	8,469,629	29,806,791	4,540,498	25,266,293	57,010,341	36,245,000	45,694,261	1927	..... do
2,492,040	85,579,992	111,191,112	18,771,507	92,419,605	60,654,525	.....	100,640,038	1928	..Prairie Oil & Gas Co.
g21,992,104	91,019,054	136,026,424	35,906,624	100,119,800	60,175,000	.....	89,937,701	1927	..... do
376,446	2,242,588	3,779,633	15,518,059	0	40,284,300	2,004,395	d22,417,276	1928	Producers & Refiners Corp.
290,642	1,836,768	4,411,458	15,397,210	0	40,284,300	2,650,374	d2,933,857	1927	..... do
4,004,782	15,362,841	32,232,131	6,677,137	25,554,994	103,959,250	19,000,000	65,875,379	1928	.....Pure Oil Co.
5,154,405	12,354,492	28,174,894	4,161,962	24,012,932	105,258,450	20,000,000	59,407,748	1927	..... do
68,887	e178,363	837,012	196,574	640,438	5,314,525	.....	559,067	1928	....Red Bank Oil Co.
66,407	3,909	434,571	236,568	198,003	4,511,000	.....	1,230,900	1927	..... do
559,635	0	738,677	19,661	719,016	3,607,378	0	913,218	1928	...Reiter-Foster Oil Corp.
66,382	e85,632	152,014	31,022	120,992	3,567,378	0	1,834,337	1927	..... do
6,194,707	e3,880,297	14,507,584	6,498,280	8,009,304	57,175,581	6,557,259	c13,227,503	1928	.....Richfield Oil Co.
1,137,103	e5,201,341	10,445,711	6,480,420	3,965,291	35,690,825	12,650,000	4,541,693	1927	..... do
154,176	637,320	2,869,295	2,047,201	822,094	38,538,744	204,300	1,799,700	1928	....Rio Grande Oil Co.
285,026	338,844	1,677,513	1,112,508	565,005	3,017,000	2,863,000	2,385,323	1927	..... do
670,319	e58,534	832,911	593,424	239,487	12,863,000	0	3,089,467	1928	Salt Creek Cons'd. Oil Co.
788,190	e58,220	922,596	330,189	592,407	12,863,000	0	2,458,147	1927	..... do
6,604,230	5,220,673	12,666,540	239,469	12,427,071	14,968,598	0	17,235,756	1928	Salt Creek Producers Ass'n.
8,203,647	5,112,527	14,460,170	58,027	14,402,143	14,968,598	0	22,031,570	1927	..... do
19,852,430	32,478,571	72,378,723	23,303,340	49,075,383	201,412,821	49,353,933	37,023,379	1928	....Shell Union Oil Co.
49,648,808	24,393,420	91,096,154	18,235,122	72,861,032	201,412,821	79,745,000	30,628,358	1927	..... do
758,777	3,399,494	5,696,381	619,497	5,076,884	8,060,380	407,500	7,991,299	1928	.....Simms Pet. Co.
492,685	3,411,734	5,485,013	1,311,138	4,173,875	6,908,180	3,313,500	6,397,220	1927	..... do
55,375,028	24,744,594	101,840,003	17,016,454	84,823,549	233,610,324	89,677,993	40,814,501	1928	..Sinclair Cons. Oil Corp.
10,808,467	23,617,471	54,036,590	16,777,349	37,259,242	221,019,129	92,333,236	32,786,483	1927	..... do
2,106,520	3,342,571	8,904,242	4,363,422	4,540,820	27,239,265	15,078,081	10,259,208	1928	.....Skelly Oil Co.
1,518,208	e4,562,074	7,449,558	1,839,094	5,610,464	27,341,740	14,800,000	8,770,012	1927	..... do

Comparative Income Reports, Assets, Reserves, Current

Company	Year	Net Operating Income	Net Profits	Net Per Common Share	Percent of Profit on Total Invested Capital	Total Assets After Reserves	Fixed Assets After Reserves	Depreciation, Depletion & Amort., Res.	Permanent Investments
Solar Refg. Co.	1928	.....	450,238	1.12	10.3	7,192,171	2,132,683	3,626,038	2,684,015
do	1927	.....	d878,057	0	0	7,019,581	2,338,269	3,336,462	.....
South Penn Oil Co.	1928	a	1,911,165	4.89	3.9	50,063,663	22,121,237	a	12,558,175
do	1927	a	1,727,774	2.16	3.7	48,689,329	21,765,947	a	12,126,735
Standard Oil Co. of Calif.	1928	66,026,086	46,083,817	3.66	8.1	589,989,632	461,515,920	177,083,984	7,535,625
do	1927	61,488,488	40,210,953	3.19	7.2	579,308,019	455,666,280	161,182,533	9,760,325
Standard Oil Co. of Ind.	1928	a	77,337,166	8.33	16.7	498,371,642	165,650,405	a	140,370,911
do	1927	a	30,132,456	3.26	7.3	462,605,841	164,719,821	a	140,338,575
Standard Oil Co., Kansas.	1928	784,659	292,228	.91	3.6	8,830,031	3,480,184	2,782,404	0
do	1927	a	d827,757	0	0	8,299,162	3,893,566	2,615,635	0
Standard Oil Co., Kentucky	1928	a	5,308,117	6.94	10.6	44,502,605	18,233,700	14,309,542	0
do	1927	a	4,492,008	6.56	13.0	40,451,641	19,253,559	12,345,438	0
Standard Oil Co., Nebraska	1928	a	b957,886	5.15	13.5	7,596,722	3,662,699	a	1,403,456
do	1927	a	b510,722	11.90	8.3	7,132,689	3,605,043	a	0
Standard Oil Co., N. J.	1928	227,667,158	108,485,686	4.43	8.6	1,572,267,610	651,602,971	551,437,054	190,950,140
do	1927	139,197,266	40,422,857	1.52	3.4	1,426,601,248	656,644,875	493,991,148	141,363,141
Standard Oil Co., N. Y.	1928	80,821,895	39,645,228	2.28	6.2	695,385,776	451,200,920	308,517,429	8,051,059
do	1927	59,934,400	11,414,888	.67	1.8	678,088,774	443,367,687	285,327,958	8,327,151
Standard Oil Co., Ohio	1928	13,406,735	3,896,549	6.08	11.1	45,779,421	28,946,600	9,699,952	.....
do	1927	3,784,543	2,335,042	3.27	5.8	42,290,678	27,865,031	8,931,995	.....
Sun Oil Co.	1928	13,486,496	5,008,027	3.92	7.7	74,500,081	45,491,676	25,897,020	4,684,707
do	1927	8,958,011	2,791,058	2.20	4.7	65,748,292	36,885,522	19,909,901	6,427,000
Superior Oil Corp.	1928	984,560	d662,153	0	0	7,135,724	4,673,522	11,716,287	45,100
do	1927	1,160,069	d545,059	0	0	5,344,600	4,674,742	10,771,105	0
Swiss Oil Corp.	1928	1,377,811	284,143	.06	3.6	7,998,496	6,999,425	6,423,593	2,001
do	1927	1,319,998	68,287	.01	0.7	8,905,032	8,065,823	5,207,717	28
Texas Corp.	1928	98,745,691	45,073,880	5.34	11.3	461,818,364	266,381,139	207,009,878	6,200,897
do	1927	60,585,945	20,029,406	2.78	6.8	324,806,302	186,322,423	140,786,412	673,000
Tide Water Assoc. Oil Co.	1928	31,499,967	14,132,543	2.01	8.0	249,379,672	156,374,792	106,255,052	10,628,886
do	1927	20,718,747	5,345,872	.20	3.0	248,909,125	162,659,376	98,118,536	11,436,598
Transcontinental Oil Co.	1928	4,116,207	1,506,803	0.40	2.6	58,252,626	47,563,354	1,545,730	381,391
do	1927	1,249,368	d1,380,146	0	0	54,106,296	47,869,786	1,251,974	458,809
Union Oil Co. of Calif.	1928	24,738,176	11,101,935	2.92	6.0	218,837,393	160,467,781	123,404,987	881,702
do	1927	25,638,087	10,048,494	2.65	5.6	189,993,373	130,367,070	143,780,423	1,213,875
Union Tank Car Co.	1928	j3,207,997	2,731,958	8.78	5.8	47,620,581	36,145,980	a	.....
do	1927	j3,623,233	2,822,410	9.15	6.1	47,593,073	39,397,365	a	.....
Vacuum Oil Co.	1928	a	37,659,458	7.46	23.0	186,864,052	26,778,948	a	56,665,208
do	1927	a	25,559,900	10.17	17.7	158,798,137	25,231,613	a	40,119,302
Warner-Quinlan Co.	1928	1,978,490	1,413,736	3.86	8.8	20,464,407	12,894,159	1,388,118	767,315
do	1927	1,290,085	787,560	3.00	7.8	12,408,256	7,924,389	869,791	760,941
Washington Oil Co.	1928	a	58,153	8.17	11.3	551,244	446,444	a	58,000
do	1927	a	23,192	6.46	5.0	512,038	404,532	a	58,000
White Eagle Oil & Refg. Co.	1928	2,766,313	1,485,324	3.03	8.1	19,924,398	12,535,370	13,437,634	158,123
do	1927	2,131,941	872,724	1.78	4.7	19,372,547	12,643,224	12,136,826	158,123
H. F. Wilcox Oil & Gas Co.	1928	1,643,956	468,612	1.09	2.1	22,712,897	19,771,020	8,120,642	563,699
do	1927	2,538,207	300,575	0.70	1.5	20,223,157	18,969,979	7,844,857	.....
Total 1928		$1,106,593,360	*$604,192,616	.....	8.14	$8,598,548,529	$4,902,398,032	$2,995,111,849	$678,174,969
Total 1927		787,249,438	*305,887,408	.....	4.29	7,902,353,276	4,680,180,471	2,600,038,084	636,261,884

*In 1928 Net Profit of 64 companies was $611,618,135 and net loss of 6 companies was $7,425,519. In 1927 net profit of 57 companies was $318,154,662 and net loss of 13 companies $12,267,254.

(a) Amount not given in published report. (b) Indicated. (c) Includes capital surplus. (d) Deficit or loss. (e) Includes all salable goods. (f) Includes surplus. (g) Includes investments in stocks of affiliated companies. (h) Before depletion, depreciation and federal income taxes. (i) Fiscal years ended March 31 1929, and 1928. (j) After depreciation only.

(*Continued from Page* 27)

Companies whose net profits exceeded $10,000,000 were:

Atlantic Refining Co.	$16,848,807
Gulf Oil Corp	36,325,140
Humble Oil & Refining Co.	19,277,145
Pan American Petroleum & Transport Co.	10,071,576
Prairie Oil & Gas Co.	10,537,431
Pure Oil Co.	11,225,081
Shell Union Oil Corp.	20,395,021
Sinclair Consolidated Oil Corp.	13,447,347
Standard Oil Co., California	46,083,817
Standard Oil Co., Indiana	77,337,166
Standard Oil Co., New Jersey	108,485,686
Standard Oil Co., New York	39,645,228
The Texas Co.	45,073,880
Tide Water Associated Oil Co.	14,132,543
Union Oil Co., California	11,101,935
Vacuum Oil Co.	37,659,458

Comment of officers of some of the companies in their reports to stockholders and statements about the year's operations were:

Amerada Corp.

Crude oil production was 6,286,507 barrels, a daily average of 17,176 barrels, as compared with 29,385 barrels average in 1927.

Natural gasoline production in 1928 was 21,759,465 gallons, a daily average of 59,452 gallons as compared with 68,615 gallons in 1927.

Crude oil held in storage Dec. 31, 1928, amounted to 1,111,795 barrels, a decline of 231,289 barrels in 1928. At the end of the year the company had 600 oil wells and 20 gas wells. Thirty-five wells were drilling.

President E. L. DeGolyer reported stocks of gasoline and crude oil were carried on the books Dec. 31 at $345,000 less than the market value that date.

Atlantic Refining Co.

J. W. Van Dyke, chairman of the board, told stockholders that each general division of the company's business earned a profit, and the Atlantic Pipe Line Co.'s line in Texas contributed $1,361,000 to the profits. The line was put in operation only last year. Concerning refinery operations he said:

"The function of the refinery is, of course, to convert crude petroleum into merchantable petroleum products. Its commercial results are bounded, therefore, by the cost of its crude oil on the one hand, and the market values of its products on the other, and tempered by the cost of conversion. The conditions to be desired are a wide spread between crude oil values and product values, coupled with low manufacturing cost. During 1928 both these conditions were favorable to our business, since, as compared with 1927, the spread in values was some 37 cents more per barrel and the manufacturing cost some 13 cents less.

"Incidentally, it is important to realize that this value spread was in no sense to the disadvantage of the consumer, since the record disclose that the average price realized per gallon for products delivered to the

Position, Working and Invested Capital of 70 Companies (*Continued*)

Cash & Marketable Securities	Refined & Crude Oil Inventories	Total Current Assets	Total Current Liabilities	Net Indicated Working Capital	Capital Stock	Funded or Deferred Debt	Surplus	Year	Company
302,512	e1,595,132	2,157,763	362,313	1,795,450	4,000,000	0	329,858	1928	.....Solar Refg. Co.
3,127,743	e1,153,206	4,456,349	239,795	4,216,554	4,000,000	0	279,620	1927	..... do
a	e7,478,279	15,209,835	1,632,812	13,577,023	20,000,000	0	28,033,686	1928	....South Penn Oil Co.
3,257,551	e10,829,263	14,755,814	2,527,657	12,228,057	20,000,000	0	26,122,521	1927	..... do
37,642,937	48,575,032	118,291,342	12,547,689	105,743,653	318,852,450	0	244,410,016	1928	..Standard Oil Co., Calif.
26,590,645	53,578,122	111,148,230	10,077,205	101,071,025	314,852,450	0	236,287,319	1927	..... do
114,867,963	54,489,277	192,350,325	28,310,959	164,039,366	232,116,713	0	229,344,591	1928	..Standard Oil Co., Ind.
86,869,833	49,863,315	157,547,447	36,868,411	120,679,036	230,788,513	0	176,850,868	1927	..... do
2,884,319	1,713,426	5,349,847	728,624	4,621,223	8,000,000	0	101,407	1928	Standard Oil Co., Kansas
2,554,089	e1,306,599	4,214,775	299,162	3,915,613	8,000,000	0	d190,820	1927	..... do
a	e7,286,504	26,268,905	4,886,252	21,382,753	25,264,600	0	24,565,801	1928	Standard Oil Co., Kentucky
a	e6,777,046	21,198,076	5,063,856	16,124,220	17,103,011	0	17,277,497	1927	..... do
866,354	e1,189,553	2,530,568	384,198	2,146,370	4,649,225	0	2,398,115	1928	Standard Oil Co., Nebraska
1,981,785	e1,179,092	3,427,646	376,105	3,051,541	4,601,100	0	2,044,618	1927	..... do
263,847,071	233,822,635	713,070,158	118,105,480	584,964,678	612,105,475	167,197,000	478,043,454	1928	Standard Oil Co., N. J.
169,763,891	228,063,518	615,098,393	98,702,053	516,394,513	717,370,450	169,239,000	400,142,931	1927	..... do
20,136,681	147,209,993	228,336,767	42,376,965	185,959,802	434,094,575	103,897,044	100,571,647	1928	Standard Oil Co., N. Y.
17,043,887	135,092,339	218,730,399	41,430,112	117,300,287	427,973,275	107,857,640	86,758,712	1927	..... do
6,794,263	e6,423,891	16,112,078	3,201,679	12,910,399	21,000,000	0	13,938,612	1928	..Standard Oil Co., Ohio
382,165	e5,062,035	13,671,731	2,093,615	11,578,731	21,000,000	0	19,197,063	1927	..... do
2,952,983	11,652,449	22,452,510	7,143,162	15,311,348	49,033,668	8,992,000	6,498,158	1928	.....Sun Oil Co.
3,599,958	11,063,882	20,407,027	6,097,562	14,309,465	45,461,740	9,662,000	3,789,097	1927	..... do
106,906	166,682	2,397,785	1,680,705	717,080	9,673,715	173,600	d4,218,697	1928	.....Superior Oil Corp.
106,959	163,757	693,647	262,229	431,418	8,328,215	310,700	d3,556,544	1927	..... do
318,691	e255,283	728,318	49,596	678,772	4,900,600	967,500	1,881,056	1928	.....Swiss Oil Corp.
229,517	e223,415	562,667	120,690	441,977	4,940,800	1,800,000	1,869,586	1927	..... do
25,387,133	116,073,739	182,594,889	62,266,697	120,328,192	211,083,850	26,112,745	158,263,764	1928	.....Texas Corp.
18,108,477	89,557,738	135,140,569	29,942,179	105,198,390	180,481,075	0	111,059,396	1927	..... do
21,328,256	29,213,302	70,012,960	15,736,452	54,276,508	145,725,327	19,230,000	11,615,444	1928	...Tide Water Ass'd. Oil
10,380,558	31,271,338	60,639,263	13,983,417	46,655,846	144,741,065	28,821,788	3,164,310	1927	..... do
3,588,419	e2,744,492	7,776,946	1,424,977	6,351,969	41,006,213	13,144,653	2,128,540	1928	..Transcontinental Oil Co.
1,249,408	e3,575,425	5,419,252	5,398,783	20,469	40,648,094	5,736,000	621,737	1927	..... do
13,344,360	26,666,701	56,793,188	11,465,632	45,327,556	94,876,425	23,870,697	64,103,835	1928	Union Oil Co. of Calif.
18,205,209	26,749,990	57,777,078	9,649,642	48,127,436	94,798,100	23,388,500	60,616,834	1927	..... do
9,218,636	a	11,314,677	517,167	10,797,510	31,101,200	10,400,000	4,905,970	1928	....Union Tank Car Co.
6,041,999	a	8,025,256	482,976	7,542,280	30,844,000	11,700,000	3,738,052	1927	..... do
33,740,306	e44,229,536	103,415,247	17,907,887	85,507,360	126,180,350	0	37,494,629	1928	.....Vacuum Oil Co.
32,103,587	e34,456,674	93,118,778	11,771,263	81,347,515	62,809,550	0	81,717,324	1927	..... do
1,009,363	3,530,580	6,498,185	4,421,758	2,076,427	12,262,740	1,649,864	2,067,545	1928	.....Warner-Quinlan Co.
527,549	1,443,909	3,510,433	2,088,379	1,422,054	5,509,500	2,481,000	1,979,403	1927	..... do
7,445	e37,876	46,800	37,467	9,333	396,225	.....	117,553	1928	....Washington Oil Co.
8,112	e25,789	49,506	56,413	0	396,225	.....	59,400	1927	..... do
921,442	e4,127,490	6,916,434	1,611,257	5,305,177	9,438,258	4,577,000	4,297,882	1928	White Eagle Oil & Refg. Co.
552,852	4,018,868	6,252,674	951,478	5,300,156	9,438,258	4,755,000	4,139,765	1927	..... do
1,684,074	23,228	2,113,315	296,818	1,816,497	10,837,153	2,000,000	9,427,192	1928	H. F. Wilcox Oil & Gas Co.
242,042	7,622	724,937	228,142	497,795	10,837,328	735,000	8,332,778	1927	..... do
$834,220,795	$1,184,085,688	$2,745,571,947	$543,435,468	$2,203,722,055	$4,267,273,691	$833,900,568	$2,317,382,825		.....Total 1928
641,811,692	1,112,325,408	2,445,296,680	479,421,101	1,912,116,287	4,138,938,765	902,230,611	2,088,266,821		.....Total 1927

consuming public by your company was lower than at any time during the preceding four years, and probably longer."

The company invested in plant and equipment, particularly the pipe line, 46 per cent of last year's net profits.

Barnsdall Corp.

Operating subsidiaries of this company in 1928 completed 64 wells of which 46 were oil, five gas, and 13 dry. At the end of the year it had 2965 producing oil and gas wells distributed as follows: California 111; Indiana 13; Illinois 22; Kansas 136; Oklahoma 1732; Ohio 189; Pennsylvania 296; Texas 169, and West Virginia 297.

Subsidiaries produced the following products:

Natural gas (M. cubic feet)	8,153,811
Crude oil (Net bbls.)	9,486,519
Casinghead gasoline (Gals.)	17,914,153
Refined products (Gals.)	154,968,266

The daily average crude production was 25,919 barrels of which only 815 barrels average was heavy oil. In 1927 the average production was 29,641 barrels, and in 1926 15,409 barrels. The average price received for the crude was $1.38 a barrel, the same as in 1927.

Other data disclosed in the report are: 2590 employes; 1087 tank cars owned or leased; 436 automobiles, trucks and tractors; 448 miles of pipe lines; 21 pump stations; 2,330,000 barrels of crude oil storage, and 1,011,050 barrels of refined oil storage.

Crystal Oil Refining Corp.

Greatest efforts of this company, according to S. P. Clark, vice-president, were toward development of marketing outlets for its products. Interest was bought in distributing companies in Mississippi, through which outlets the company last year sold 2,694,462 gallons of gasoline, 461,707 gallons of kerosene and 130,852 gallons of lubricating oils. The ratio of gasoline sales to lube sales at stations was approximately 20.6 to 1.

Crystal also reported selling approximately 1,800,000 gallons of gasoline at its own stations in greater Shreveport.

In the refining division the chief development was the organization of the Burford Oil Co. in which Crystal has a half interest. This company began operations at its new Pecos City, Texas, refinery this year.

General Asphalt Co.

This company's production in 1928 was 246,357 tons of asphalt and 2,182,900 barrels of crude oil including royalty receipts. In 1927 the production was 298,315 tons of asphalt and 2,010,330 barrels of oil.

The company wrote off $1,220,156 when it retired last year from its unsuccessful venture in the electric refrigeration field.

Gulf Oil Corp.

Gross production of subsidiaries of this company in 1928 was 74,258,793 barrels, a daily average of 202,800 barrels. Net production after deduction of royalty and working interests was 63,062,800 barrels, a daily average of 172,300 barrels. The Gulf statement for 1927 said production that year exceeded 150,000 barrels daily. The production in 1928 came from 5700 wells in Kansas, Oklahoma, Texas, Arkansas, Louisiana, Venezuela and Mexico.

Concerning expansions last year, W. L. Mellon, president of Gulf, wrote stockholders:

"During the year this company and its operating companies made additional investments in properties, plant and equipment of $49,600,000. The principal items comprise additions to leaseholds; enlargement of pipe lines and storage systems, including an additional 10,000 barrels daily capacity for the main line from Oklahoma to Port Arthur, Texas, refinery; enlargement of refinery at Philadelphia; increase in tank fleet and in bulk and retail distributing stations. An additional investment of about $5,000,000 was made in the capital stock of marketing companies in Europe, in which we previously owned a 25 per cent stock interest. . . .

"The large increase in production of crude oils containing a high sulfur content obtained in West Texas and Venezuela, makes necessary substantial expenditures for changes and additions to plant looking to more economical processes of refining. This, together with the necessity for additional marketing facilities, causes the management to believe that it is prudent to continue the policy of retaining surplus earnings for reinvestment."

Total Invested Capital

	1928	1927
Amerada Corp.	$21,127,317	$20,333,873
American Republic Corp.	50,656,706	58,042,536
Atlantic Refg. Co.	131,030,583	117,540,248
Barnsdall Corp.	72,932,209	69,542,539
Beacon Oil Co.	28,998,390	28,645,301
Borne Scrymser Co.	1,524,925	1,543,244
Buckeye Pipe Line	13,026,783	13,169,754
Chesebrough Mfg. Co.	4,720,523	4,318,977
Continental Oil Co.	79,101,760	77,179,227
Crystal Oil Refg. Corp.	4,109,801	3,923,944
General Asphalt Co.	44,456,228	45,273,162
Gulf Oil Corp.	359,806,917	324,303,263
Honolulu Cons. Oil Co.	50,382,147	52,348,970
Houston Oil Co.	51,796,126	49,097,166
Humble Oil & Refg. Co.	181,661,595	178,315,770
Illinois Pipe Line Co.	28,955,957	27,819,571
Independent Oil & Gas	43,892,827	27,746,730
Indian Refg. Co.	24,793,825	19,292,634
Lion Oil Refg. Co.	7,157,798	6,188,139
Louisiana Oil Refg. Co.	17,579,395	16,316,093
Marland Oil Co.	100,215,447	113,718,106
Mid-Cont. Pet. Co.	82,724,302	81,544,686
Mountain & Gulf Oil Co.	7,750,461	9,386,255
Mountain Prod. Corp.	29,108,564	33,448,541
National Transit Co.	9,355,148	12,496,700
New York Transit Co.	4,164,227	6,274,140
North Central Texas Oil Co.	3,389,720	2,303,059
Northern Pipe Line Co.	2,211,525	4,203,913
Ohio Oil Co.	100,661,818	100,494,884
Pan Amer. Pet. & Trans.	230,078,536	235,086,542
Panhandle Prod. & Refg.	5,048,807	5,727,864
Paragon Refg. Co.	7,235,418	5,620,352
Pennok Oil Corp.	621,610	651,402
Phillips Pet. Co.	122,165,375	138,949,602
Prairie Oil & Gas	161,294,563	150,112,701
Producers & Rfrs. Corp.	19,871,419	40,030,817
Pure Oil Co.	*188,834,629	*184,666,198
Red Bank Oil Co.	5,873,592	5,741,900
Reiter Foster Oil Corp.	4,520,596	5,401,715
Richfield Oil Co.	76,960,343	52,882,518
Rio Grande Oil Co.	40,542,744	8,265,323
Salt Creek Cons'd Oil Co.	15,952,467	15,321,147
Salt Creek Prod. Assn.	32,204,354	37,000,168
Shell Union Oil Co.	287,790,133	311,786,179
Simms Pet. Co.	16,459,179	16,618,900
Sinclair Cons'd Oil Corp.	364,102,818	346,138,848
Skelly Oil Co.	52,576,554	50,911,752
The Solar Refg. Co.	4,329,858	4,279,620
South Penn Oil Co.	48,033,686	46,122,521
Standard Oil Co. of Calif.	563,262,466	551,139,769
Standard Oil Co. of Ind.	461,461,304	407,639,381
Standard Oil of Kansas	8,101,407	7,809,180
Standard Oil of Ky.	49,830,401	34,380,508
Standard Oil of Nebraska	7,047,340	6,645,718
Standard Oil of N. J.	1,257,345,929	1,286,752,381
Standard Oil of N. Y.	638,563,266	622,589,627
Standard Oil of Ohio	34,938,612	40,197,063
Sun Oil Co.	64,523,826	58,912,837
Superior Oil Corp.	5,628,618	5,082,371
Swiss Oil Corp.	7,749,156	8,610,386
Texas Corp.	395,460,359	291,540,471
Tide Water Ass'd Oil Co.	176,570,771	176,727,163
Transcontinental Oil Co.	56,279,406	47,005,8.1
Union Oil of Calif.	182,850,957	178,803,434
Union Tank Car Co.	46,407,170	46,282,052
Vacuum Oil Co.	163,674,979	144,526,874
Warner-Quinlan Co.	15,980,149	9,969,903
Washington Oil Co.	513,778	455,625
White Eagle Oil & Refg. Co.	18,313,140	18,333,023
H. F. Wilcox Oil & Gas Co.	22,264,345	19,905,106
Total	$7,418,557,084	$7,129,436,197

*Fiscal years ended March 31, 1929 and 1928

Honolulu Consolidated Oil Co.

Pinching back of production because of large recovery is reported by A. C. Dierickx, president. This company operates in California and Wyoming and has acreage in Texas, New Mexico, and Colorado.

Houston Oil Co.

Gas earnings held up in spite of low fuel oil prices, E. H. Buckner, president, reported. Lease holdings were extended in 1928 in Oklahoma, New Mexico, and South and West Texas. Pipe line facilities were also extended.

Independent Oil & Gas Co.

Waite Phillips, chairman, and E. H. Moore, president, reported:

"The total net production of crude oil for the year was approximately 11,000,000 barrels from 768 wells in Oklahoma, Kansas and Texas, all of which was marketed through the company's refineries and by sale to various companies. The company's oil pipe lines were increased from 220 to 535 miles, its natural gas pipe lines were increased from 210 to 275 miles, and the latter are now transporting and marketing over 60,000,000 cubic feet of natural gas per day, as compared with 20,000,000 cubic feet per day during 1927.

"The company has a refining capacity of approximately 15,000 barrels per day and had increased its undeveloped leaseholds from 272,000 acres to 450,000 acres, a considerable portion of which is in proven and semi-proven areas in Oklahoma, Texas and Kansas, and is engaged in drilling, in proven areas only, about 30 wells, the current production running approximately 40,000 barrels per day."

The company acquired the Manhattan Oil Co. of Kansas City in 1928 with a refinery of 6000 barrels daily capacity, 228 tank cars, 265 miles of pipe lines, and 450 bulk and service stations in Kansas, Missouri, Iowa, Nebraska, and Minnesota.

Indian Refining Co.

Placing of Govers' process of manufacturing oils into commercial production was the outstanding feature of this company's operations last year.

Louisiana Oil Refining Corp.

Net production of crude oil in 1928 was 1,083,195 barrels, most of which came from the Allen district of Oklahoma. The production was an increase of 883,240 barrels over 1927 production. The company collected in its gathering lines 3,837,506 barrels of oil and transported through its trunk lines 6,492,554 barrels. It transported by tank car 3,642,554 barrels.

The company ran 7,977,590 barrels of crude oil through its refineries last year and produced 2,031,076 barrels of gasoline. In 1927 the input was 5,837,930 barrels of crude and the production of gasoline 1,425,129 barrels.

Sales of all products last year as compared with sales in 1927 follow:

	1928 Barrels	1927 Barrels
Gasoline	103,303,000	68,503,000
Kerosene	3,782,000	5,605,000
Gas oil	26,978,000	25,248,000
Fuel oil	96,540,000	129,364,000
Asphalt	4,777,000	4,577,000
Motor oils	1,441,000	1,270,000
Industrial oils	494,000	527,000
Greases	784,000	677,000
Total	237,799,000	235,771,000

The company distributed through its own retail stations 39.94 per cent of the gasoline produced, Richard B. Kahle, president, reported.

The company reported the following comparison of marketing facilities:

	1928	1927
Bulk stations	74	67
Filling stations	383	328
Loaned pumps	3,948	3,024

The company since the report was compiled has sold its chain of bulk and service stations in Ohio to the Cities Service Oil Co.

Marland Oil Co.

D. J. Moran, president, submitted the following comparative figures:

	1928	1927
Net production of crude	12,834,636	15,307,409
Daily average production	35,068	41,938
Pipe line runs of crude	9,097,689	18,084,085
Crude run through refinery	7,601,315	7,823,782
Daily average refinery runs	20,768	21,376
Inventory of crude, Dec. 31	3,118,982	6,464,848
Inventory refined oils, Dec. 31	1,702,320	2,018,706
Sales of crude and refined oils	22,656,879	25,662,535
Reagan County Purchasing Co., crude sales	7,114,020	8,224,590
Casinghead production (Gals.)	23,561,412	34,100,662
Natural gas sales (M. cu. ft.)	10,934,289	11,183,306
Oil leased owned (acres)	1,780,166	2,411,577
Average crude production in Dec.	35,844	34,921

Marland last year spent $6,513,029 on additions to property as compared with $17,595,457 in 1927.

Pan American Petroleum & Transport Co.

Accounts of Lago Oil & Transport Corp. are included in 1928 report but Pan American carried Lago only as an "investment" in the 1927 and previous reports. This fact should be

considered in the comparison in the attached table of annual reports.

Subsidiaries in 1927 produced 46,631,774 barrels of crude oil in Mexico, Venezuela and the United States. This was an increase of 7,735,474 barrels over the 1927 production. R. G. Stewart, president, told stockholders the policy of the company was to regulate production, wherever possible, to market capacity.

Work on refining facilities progressed at Aruba, Dutch West Indies, and on an asphalt plant at Hamburg, Germany. Marketing facilities were expanded in the eastern and southern states and in Mexico and South America.

Panhandle Producing & Refining Co.

Net crude production in 1928 was 621,458 barrels as compared with 1,293,339 barrels in 1927. Roy B. Jones, president, said the decline was due to the falling off in production in one well in the deep lime in Young County, Texas, and in a joint operation in Hutchinson county. The one Young county well produced a net of 549,470 barrels in 1927 and only 67,554 barrels last year. The company's crude production Dec. 31, 1928, was 1527 barrels.

Throughput at the Panhandle refinery in 1928 was 1,281,766 barrels, a daily average of 3512 barrels. The company marketed 8,389,243 gallons of gasoline, or 80 per cent of that it produced, through its own bulk stations. Improved prices for gasoline resulted in operation of the refinery at a profit.

Pennok Oil Corp.

Crude production in 1928 totaled 236,006 barrels net, an average of 645 barrels a day as compared with 769 barrels a day in 1927. This oil was sold at an average price of $1.35 a barrel as against $1.38 a barrel in 1927 and $2.31 a barrel in 1926, John L. Weeks, president, reported.

Phillips Petroleum Co.

This company's 2800 wells produced in 1928 14,668,881 barrels gross and 11,142,954 barrels net of crude oil. It owns or controls 1,097,824 acres of leases in Oklahoma, Kansas, Texas, Arkansas, Colorado, Utah and New Mexico.

It maintained its leadership in output of natural gasoline, Frank Phillips, president, reported, by producing 187,589,046 gallons. Forty-seven natural gasoline plants were being operated at the end of 1928.

Products of the company were being marketed through 1500 outlets west of the Mississippi, of which number 300 were owned bulk and service stations. All but four of the bulk and service stations were acquired last year.

The company also marketed 118,190,931,000 cubic feet of natural gas.

Producers & Refiners Corp.

Excessive valuations were eliminated from the company's accounts last year, L. R. Crawford, president, reported to stockholders. The A.P.I. uniform method of accounting was applied.

Pure Oil Co.

Production and refining facilities were expanded, President Henry M. Dawes reported.

Red Bank Oil Co.

President Homer T. Lamb reported the following comparisons on crude oil productions:

	1928	1927	1926
Barrels	252,435	252,879	209,269
Net value	$255,622	$348,684	$456,908

Reiter-Foster Oil Corp.

Net production in 1928 amounted to 512,187 barrels which sold for $777,186. Gas sales amounted to $18,285. Dec. 31 the company had leases on 61,421 acres in Colorado, Kansas, New Mexico, Oklahoma, Texas and Wyoming, and royalty interest in 9364 acres.

The company's most important development in 1928 was the Bunyard lease at Little River, Seminole county. Four wells were drilled at a cost of $301,154 for the leasehold, drilling, labor, teaming, freight, line pipe, casing, tubing, engines and pumps, and tankage. The lease last year, although the wells were pinched in for many months, produced 401,781 barrels net of 40 gravity oil, which were marketed for $640,446 and the gas was sold for $14,666.

Richfield Oil Co.

Production of crude oil and natural gasoline in 1928 totaled 10,977,000 barrels, as compared with 6,440,000 barrels in 1927, and 4,008,000 barrels in 1926. Sales of gasoline amounted to 276,306,000 gallons, an increase of 117,857,000 gallons or 75 per cent over sales in 1927. In 1924 the company's gasoline sales amounted to 48,343,000 gallons. Large gains in gallonage have been made each subsequent year, James A. Talbot, president, reported.

Rio Grande Oil Co.

L. E. Lockhart, president, reports that crude oil production in 1928 amounted to 1,434,835 barrels, as compared to 687,677 barrels in 1927. Casinghead gasoline production amounted to 8,166,955 gallons as compared with 4,965,072 gallons in 1927.

The company spent $3,794,855 last year on expansion of its pipe lines, storage and refining facilities.

Shell Union Oil Corp.

Crude oil production of subsidiaries and partly owned companies of this corporation totaled 47,788,351 barrels net in 1928, a daily average of 130,569 barrels. Production Dec. 31, 1928, was 124,502 barrels as compared with 107,995 barrels a year before.

Throughput of crude oil at Shell refineries in 1928 totaled 60,209,057 barrels, as compared with 53,536,326 barrels in 1927. The subsidiaries produced 160,096,326 gallons of natural gasoline.

J. C. Van Eck, president, in his reports to stockholders commended the conservation efforts of the industry, the Federal Oil Conservation board and the officials of the large oil producing states.

Simms Petroleum Co.

Crude oil production averaged 12,381 barrels daily in 1928, according to Edward T. Moore, president. Daily average refinery throughput was 4579 barrels daily. The company reported marketing more than half its gasoline production through its own stations. It spent $952,792 on additions to property.

Sinclair Consolidated Oil Corp.

H. F. Sinclair, chairman of the board, tells the story of Sinclair companies' operations in 1928, with 1927 comparisons, in the following table:

	1928	1927
Net crude production in U. S. (bbls.)	13,629,075	14,704,201
Net crude production in Mexico (bbls.)	2,393,718	2,765,416
Net casinghead gasoline production (gals.)	109,664,085	79,566,923
Crude oil run through refineries (bbls.)	33,433,489	30,309,721
Gasoline sold (gals.)	876,841,681	791,392,154
Oil cargoes transported by ocean tank steamships (bbls.)	18,897,120	17,920,810
Sinclair Pipe Line Co. (50% owned)—crude oil deliveries (bbls.)	37,092,018	32,253,191
Sinclair Crude Oil Purchasing Co. (50% owned)—Net amount of crude oil on hand December 31 (bbls.)	38,502,392	36,036,053

Skelly Oil Co.

This company's operations are summarized in the following comparative table from the report of W. G. Skelly, president:

	1928	1927
Net crude production (bbls.)	6,475,619	5,418,123
Output of gasoline (gals.)	162,078,138	151,853,583
Output of lubes (gals.)	3,204,044	2,998,463
Output of other light oils (gals.)	25,457,398	21,738,595
Output of fuel oil (bbls.)	1,489,495	1,754,145
Products sold through own stations	46,588,071	40,730,287

At the end of 1928 Skelly had 1272 producing wells on 54,544 acres of leases, as compared with 1241 wells at the end of 1927 on 48,466 acres of leases. It held Dec. 31, 1928, 553,903 undeveloped acres as compared with 485,500 undeveloped acres at the end of 1927.

The company had a fleet of 1012 tank cars which transported 30,034

carloads of oils of all descriptions last year, as compared with 27,263 carloads in 1927, and 21,809 carloads in 1926.

Standard Oil Co. of California

This company in 1928 produced 49,481,849 barrels of crude oil, a daily average of 135,196 barrels a day, K. R. Kingsbury, president, reported to stockholders. The daily average in 1927 was 147,042 barrels a day. Last year it had shut in a daily average of 29,508 barrels as compared with 22,954 barrels the year before.

At the end of last year the company had leases on 706,539 acres, held in fee 298,094 acres, and held mineral rights to 41,894 acres, a total of 1,046,527 acres. This acreage was all in the United States. In Colombia, Mexico and Venezuela it held drilling rights to 941,211 acres and owned in fee in Colombia 3780 acres.

At the end of 1928 it was producing 386,057 gallons of natural gasoline daily from 48 plants.

Refinery runs in 1928 averaged 142,888 barrels daily as compared with 159,279 barrels daily in 1927.

Dec. 31 it had 802 distributing stations.

Dec. 31 it held in storage 49,345,293 barrels of crude and refined oils.

Standard Oil Co.'s of Indiana, Ohio and New Jersey

Previously reported.

Swiss Oil Corp.

Crude production in 1928 was 766,939 barrels net, as compared with 923,079 barrels net in 1927, and 976,271 in 1926.

The Texas Corp.

Net crude oil production in 1928 amounted to 38,594,965 barrels, as compared with 22,569,278 barrels in 1927. The increase was brought about largely by the acquisition of other companies, chief of which was the California Petroleum Corp.

Pipe line runs of subsidiaries totaled 51,912,709 barrels, an increase of 11,973,054 barrels over 1927 runs. Deliveries to The Texas Co. refineries amounted to 47,861,703 barrels.

Crude run to stills totaled 55,083,523 barrels, an increase of 16,616,576 barrels over 1927 runs. The percentage of gasoline made was 51.1 per cent of the crude run as compared with 46.7 per cent in 1927. Of the crude run 18.6 per cent was heavy with little gasoline content, R. C. Holmes, president, told stockholders.

Gasoline sales were 36.5 per cent larger than in 1927 and lube sales 7.6 per cent larger.

Transcontinental Oil Corp.

Gross crude production last year averaged 15,943 barrels a day, as compared with 10,382 barrels in 1927, and 7732 barrels in 1926, President F. B. Parriott reported.

Union Oil Co. of California

Gross production in 1928 was 13,735,843 barrels as compared with 15,389,681 barrels in 1927. Average production of natural gasoline and crude oil from 616 wells was approximately 46,000 barrels daily.

Sales of all products amounted to 33,902,783 barrels, an increase of 2,622,777 barrels over 1927 sales.

Dec. 31 the company held in fee 601,838 acres and under lease 87,618 acres, a total of 689,456 acres.

White Eagle Oil & Refining Co.

Crude produced in 1928 amounted to 745,656 barrels. Refinery runs totaled 3,507,406 barrels. Sales last year at stations amounted to 93,514,656 gallons of all oils, L. L. Marcell, chairman, and R. R. Irwin, president, reported.

H. F. Wilcox Oil & Gas Co.

H. F. Wilcox, president, reported company's 1928 production from its 234 wells in Kansas, Oklahoma and Texas exceeded 2,000,000 barrels. The company had approximately 350,000 acres of leased and royalty oil lands.

S. S. Cramer Heads Board Of Wadhams Oil Corp.

MILWAUKEE, Aug. 10.—Officers and directors of the Wadhams Oil Corp., a merger of the Wadhams Oil Co. and the Bartles-Maguire Oil Co., are S. S. Cramer, chairman of the board; A. G. Maguire, president; H. W. Dodge, executive vice-president; H. J. Stolz, vice-president; J. H. Marschutz, vice-president; Louis McNally, secretary; E. N. Kullman, treasurer; R. W. Fritzke, Jr., director; and R. T. Schwalbach, director.

Messrs. Maguire, Stolz and Fritzke were with Bartles-Maguire Oil Co. The others were with Wadhams Oil Co.

The merger was effected recently by a stock increase by the Wadhams company to take over the stock of Bartles-Maguire.

Gasoline Stocks Cut 1,573,000 Barrels

By Telegraph

NEW YORK, Aug. 13

STOCKS of gasoline at U. S. refineries were reduced 1,573,000 barrels in the week ended Aug. 10 according to figures gathered by the American Petroleum Institute. Fuel oil stocks also were reduced, the cut amounting to 272,000 barrels.

Reports on which the Institute based its figures were gathered from plants with an aggregate capacity of 3,068,250 barrels per day which represented 91.9 per cent of the total active refining capacity of the U. S.

Crude runs were reduced slightly during the week. Average runs were 2,613,900 barrels as compared with 2,642,400 barrels in the week ended Aug. 2, a cut of 28,500 barrels daily average.

American Petroleum Institute report of refinery operations in the United States for the week ended Aug. 10, compared with the week ended Aug. 3

	Per Cent of Capacity Reporting	Crude Run to Stills Wk. Ended 8-10 (Barrels)	Crude Run to Stills Wk. Ended 8-3 (Barrels)	Per Cent of Reporting Capacity Operated Wk. Ended 8-10	Per Cent of Reporting Capacity Operated Wk. Ended 8-3	Stocks Reported in Thousands of Barrels: Gasoline Stocks Aug. 10	Gasoline Stocks Aug. 3	Gas & Fuel Oil Stocks Aug. 10	Gas & Fuel Oil Stocks Aug. 3
East Coast	100.0	3,569,100	3,485,500	89.9	88.1	4,843	4,659	10,847	10,555
Appalachian	85.5	562,400	605,400	80.5	87.8	930	996	1,099	1,074
Ind., Ill., Ky	98.7	2,142,000	2,143,800	94.3	94.3	5,767	5,857	3,697	3,673
Okla., Kan., Mo	70.7	1,760,900	1,753,700	84.0	76.4	2,914	3,176	4,618	4,758
Texas	87.0	3,665,800	3,656,300	88.8	88.2	4,045	4,659	12,260	12,692
La., Ark	92.9	1,201,600	1,230,900	73.5	74.5	1,648	2,013	5,214	5,449
Rocky Mountain	93.2	455,600	442,200	52.5	52.6	1,590	1,687	682	666
California	98.7	4,940,100	5,178,900	85.1	89.5	11,834	12,097	105,097	104,919
Total U. S.	91.9	18,297,500	18,496,700	85.2	85.5	33,571	35,144	143,514	143,786
Texas (Gulf Coast)	99.3	2,828,400	2,795,100	90.6	90.0	3,397	3,935	9,392	9,813
La. (Gulf Coast)	100.0	892,400	870,000	82.3	80.2	1,390	1,749	4,368	4,588

Mid-Continent Association Defers Action on Tariff Question

TULSA, Aug. 8

THE Mid-Continent Oil & Gas Association is still on neutral ground on the tariff question. It is going to take at least one more meeting to determine what if any stand the association will take. The president has been instructed to call such a meeting, but due to his absence from the city, no date had been set at the time this was written.

The 14 members of the executive committee who answered the president's summons for a meeting the afternoon of August 6 to discuss the question, sat in the directors' room in their shirt sleeves while the temperature outside was setting a new high record for this year—106 degrees F. —and finally voted to defer action.

The August 6 meeting had been called at the insistence of Wirt Franklin of Ardmore. Mr. Franklin was not present, but was represented by H. B. Fell of Ardmore.

Mr. Fell opened the discussion by calling attention to the fact that in 1921 the association prepared a brief asking for a tariff on oil. Excerpts from the brief were read by Mr. Fell. He argued that conditions were the same now as at that time, and that if the association favored a tariff in 1921 it should take the position of favoring it in 1929.

W. C. Franklin of the Tidal Refining Co. before leaving the meeting due to press of other business expressed his attitude by saying he thought the best thing for the association to do was to decide not to do anything. He said the attitude of the association had been to work on problems on which there was a uniformity of opinion, and that since there was such a well defined difference of opinion within the association on the tariff question the best policy in his estimation was to refrain from taking a hand in the matter.

C. J. Wrightsman, who like Wirt Franklin is an Independent producer, was of opinion the question was the greatest ever before the association. He was of the opinion that the Mid-Continent was being seriously threatened by the imports of oil and that the question was one which should be confined to the Mid-Continent operators and "disassociated from the New York interests." He believed, he said, that a tariff would not harm but materially aid the Mid-Continent refiners.

E. B. Reeser, president of Barnsdall Corp., and of the American Petroleum Institute took the stand that a tariff would be detrimental to Mid-Continent refiners. "The trouble is not due to the importation of oil", Mr. Reeser said, "but is entirely due to the influx of California gasoline."

The first motion was presented by C. C. Herndon, vice president of Skelly Oil Co. Mr. Herndon said that since there was such an apparent diversity of opinion, that for the association to take any stand would do it far more harm than good. He offered the motion that the executive committee take no position on the matter. Mr. Fell offered a substitute motion that the matter be left up to a membership meeting in October at the time of the International Petroleum Exposition. Considerable discussion followed as to whether the executive committee or the membership at large should take action, and whether or not the fourteen members present, which constituted a quorum, should take action since they had been called for that express purpose. The motion finally carried was to the effect that the matter be deferred to a later meeting when more members now on vacations could be present, the meeting to be called by the president.

Committee Votes to Keep Oil on Free List

WASHINGTON, Aug. 10.—Unless Senators Pine and Thomas of Oklahoma can overthrow the leadership of the Senate, crude petroleum and its products will remain on the customs tariff free list. The Senate finance committee voted, on August 8, against the proposition of the Oklahoma senators to transfer petroleum and its products from the free to the dutiable list. The Oklahoma senators had suggested $1 a barrel with compensatory duties on the refined products.

The basic question decided by the finance committee was as to whether there should or should not be a transfer. The decision being that there should be no transfer the question of how much of a duty there should be was not raised.

The adverse vote was expected, even by advocates of the duty. The statement was made, when arguments in favor of a duty were made to the finance committee, by E. B. Howard, former representative from Oklahoma that, regardless of the outcome of this particular effort, the fight would be continued. He said the Mid-Continent producers were determined to be placed on an equality with other producers of raw materials on the theory that if a protective tariff was good for some American producers of raw materials it was good for the producers of crude petroleum who were being brought into keen competition with foreign producers and American producers in foreign fields to such an extent that Mid-Continent crude could not get to the Atlantic coast in competition with crude from South America. The result of that inability, they asserted was a breaking of prices in the Mid-Continent.

A compilation of figures taken from the Bureau of Mines reports, meanwhile, were given to the committeemen. The figures were compiled by the statistical department of the association under the direction of C. B. Mapes. They were submitted merely to show what had been done in the way of imports and exports over the past several years.

In the compilation of total petroleum imports to total petroleum supply, it is shown that the total petroleum supply for the first six months of 1929 increased 14 per cent over the same period last year. The domestic supply increased 13 per cent while the imports increased 23 per cent, which represented 9.6 per cent of the petroleum supply.

Total petroleum demand the first six months of this year increased 11 per cent with domestic demand increasing 13 per cent as compared with the same period last year. Exports of all petroleums decreased 0.94 per cent but the total represented 15 per cent of the total petroleum demand.

Since the importation of foreign crude was one of the chief complaints of the proponents of a tariff, the total crude supply was broken down into domestic crude production and imports of foreign crudes. The total crude supply for the six months of this year as compared with that period a year ago increased 13 per cent while domestic production increased 13 per cent, and the total domestic crude production represented 92 per cent of the total supply. Imports of foreign crudes increased 16 per cent but the total volume represented only 8 per cent of the total supply.

Total petroleum imports increased the first six months of this year over that period a year ago by 23 per cent

in volume and 14 per cent in value. The crude imports increased 16 per cent in volume and decreased 6 per cent in value. Refined imports increased 61 per cent in volume and 58 per cent in value.

Total petroleum exports decreased 1 per cent in volume but increased 8 per cent in value. Breaking down the total petroleum exports into crude and refined exports, crude exports increased 33 per cent in volume and 29 per cent in value, while refined exports decreased 5 per cent in volume but increased 7 per cent in value. The percentage of refined exports to total petroleum exports was 85 by volume and 94 by value. By breaking down the total petroleum imports and exports into the various products, it was seen that crude imports increased 16 per cent the first six months of this year as compared with that period in 1928, while crude exports increased 33 per cent. Gasoline imports increased 57 per cent and exports 13 per cent. Kerosene imports decreased 2 per cent and exports decreased 9 per cent.

Gas and fuel oil imports increased 65 per cent while exports decreased 21 per cent. One of the major contentions of Wirt Franklin that a tariff should be imposed was because the importation of crude had demoralized the fuel oil market in this country.

Lubricants imports increased 307 per cent while exports decreased 3 per cent. Wax imports increased 62 per cent with exports falling off 35 per cent.

The imports of crude were broken down to show the origin of the crude imported. Mexican crude importations the first six months of 1929 as compared with that period in 1928 declined 29 per cent. Imports of Venezuelan crude increased 37 per cent. Columbian crude imports increased only .52 per cent. Imports of crude from other countries increased 28 per cent.

Foreign crude run to stills in the United States the first six months of this year represented 8 per cent of the total still runs. The increase in the runs of foreign crude for that period over the period of a year ago was 13 per cent while total still charges increased 11 per cent with domestic crude runs to stills having increased 11 per cent.

Recommends Acceptance of Code

CLEVELAND, Aug. 8.—The Nebraska Independent Oil Men's Association, of which C. M. Sutherland is secretary, has recommended to its members that they sign the Code of Marketing Practices. Signed acceptances are to be sent to the association's headquarters in Lincoln and forwarded to the Federal Trade Commission in Washington when the major companies sign.

Edward Prizer, Who Introduced Gargoyle to World, Dies

Edward Prizer

CLEVELAND, Aug. 13

EDWARD PRIZER, chairman of the board of the Vacuum Oil Co., died in Orange Memorial hospital, East Orange, N. J., Aug. 11. He was 73 years old.

Mr. Prizer had been in good health and active up to the last day of his life. On Saturday morning he played golf at the country club and in the afternoon he was playing cards in the club when he was stricken by a heart attack. He was at once taken to the hospital where he died Sunday night.

He is survived by three sons, Dr. Levis Prizer, a physician, John Prizer a lawyer and Douglas Prizer who is connected with the Vacuum Oil Co.

Mr. Prizer joined the Vacuum Oil Co. in Rochester, N. Y., in 1882, coming to the oil business from a position on a small country newspaper in Doylestown, Pa. He took the position of sales manager and at once began a program of sales promotion that has made the name Mobiloil and its Gargoyle trademark known in every country in the world.

For many years Mr. Prizer spent most of the time in Europe and it is largely due to his personal efforts that the company business was built to the great proportions it reached abroad. His last journey was a tour of Africa last winter. He was well informed always on economical and political conditions all over the world and was rated as one of the country's leading authorities on foreign trade.

An active church man, Mr. Prizer was a member of the board of governors of the Munn Avenue Presbyterian of East Orange. Also he was deeply interested in many charitable enterprises. He was a large contributor to philanthropical work and gave largely of his time and effort as well as money, being on boards of directors of several charitable organizations.

Limiting Refunds, Federal Exemption Discussed at Tax Conference

By E. L. Barringer
N. P. N. STAFF WRITER

DETROIT, Aug. 10

THAT only 80 per cent of the refund claimed on gasoline taxes should be allowed, that the tax collected on aviation gasoline be used to develop airports, that federal exemption be limited strictly to gasoline used for governmental purposes were the main topics before the fourth annual North American Gasoline Tax Conference in Detroit, Aug. 7, 8, and 9.

The committee report on limiting refunds was voted down in open conference 13 to 11. A. L. Sears, North Carolina, chairman of the committee on refunds and exemptions, explained that 80 per cent was an arbitrary figure, and that the committee favored some part of the refund being used for administrative expense.

The 80 per cent refund attracted political lightning from northern delegates who foresaw opposition from farmers refused the entire refund. Proponents countered that farmers, boat owners, fishermen and others entitled to refunds benefited from good roads. The opposition pointed out that a limited refund was an indirect tax in the refunding clause. The conference amended the committee's report by striking out the section dealing with the 80 per cent refund.

On the use of tax funds the committee report recommended that the monies should meet administration costs, should be used for roads, and for development of airports. The committee explained that taxes paid on gasoline used for aviation purposes might be reported as such, and this money set aside for airport development. The report was accepted by the conference.

Federal exemptions drew much fire from some delegates. A resolution was adopted, to be sent to President Hoover and all cabinet members, asking that exemption be allowed only on gasoline used strictly for governmental purposes. W. S. Booton, director of excise tax division, Tennessee, introduced such a resolution during his address which was referred to the committee.

Basis for the resolution was in the Panhandle vs. Mississippi case on which a U. S. Supreme court decision held that government gasoline could not be taxed by the states. Claims were made that this decision was stretched to cover gasoline sold at army posts not used for governmental purposes.

James Duce, state oil inspector, Colorado, was a leader in the fight. He cited a check made at a post in his state where 44 automobiles were serviced with gasoline in a six hour period and 42 cars were private vehicles. He said that such evasion was costing Colorado $50,000 a year. In one case he said exemption was claimed because the man was a World war veteran.

Some delegates wanted the resolution sent to a forthcoming conference of attorney generals for a ruling. F. G. Driscoll, attorney for the Sinclair Refining Co., suggested that states having penalties in their laws for nonpayment could arrest drivers of automobiles on the highway using government gasoline illegally and thus put a quick stop to any abuse.

The legislative council reported minor changes in the phraseology of the model gasoline tax law. The general policy committee recommended greater uniformity in laws, cooperation with the oil industry, the use of funds only for road purposes, and that the tax be held to a reasonable amount. That there was no possibility of having a uniform rate, but that rates should be reasonable was reported by the rates committee.

The license and bond committee report urged states, without such laws, to bond and license dealers, explaining that some filling stations were used to cover up some illegal business and that a license would help to stop such practices. Another committee had covered this point, recommending a $10,000 bond or that a company show financial responsibility.

W. A. McAtee, state oil inspector, Missouri, was re-elected president, an office he has held since the conference was organized. A. N. Bobbitt, state auditor, Indiana, was re-elected secretary. Henrietta W. Kniest, secretary to oil inspector, Missouri, was re-elected executive secretary and treasurer. A. M. Meyer, assistant attorney general, Missouri, was elected councillor.

A military hair brush set was presented to Mr. McAtee, in recognition of his service to the conference, and a wrist watch was given Henrietta Kniest. Presentation was made at the banquet.

Toronto was awarded the 1930 conference, to be held in the first week in September during the Canadian exposition. Attendance was 115 delegates representing 38 states and 16 oil companies.

Addresses were given on the first and second morning of the conference, committee reports were made on the third day. In the afternoons there were sight seeing trips to the Ford Motor Co. and Stout airport, to the General Motors proving grounds, and to Belle Isle. While committees were meeting on the first evening the White Star Refining Co. entertained the ladies at dinner and the theater. The banquet was on the second evening. Burton F. Browne, director of gasoline tax division, Michigan, was in charge of the entertainment.

SPEAKERS on the first morning program were Roger M. Andrews, Detroit publisher, for Gov. Fred W. Green; A. N. Bobbitt, state auditor, Indiana; James Duce, state inspector of oils, Colorado; Hjalmar Nilsson, state oil inspector, Minnesota; and Henrietta W. Kniest, secretary to state oil inspector, Missouri.

On the program for the second morning were F. G. Driscoll, attorney of the Sinclair Refining Co.; Beulah Bailey, department of taxation and finance, New York; Frank E. Packard, general attorney, Standard Oil Co. of Indiana; J. R. MacDonald, acting deputy, provincial secretary, province of Saskatchewan; A. M. Meyer, assistant attorney general, Missouri; James Hayes, Jr., commission motor vehicles, Virginia; W. S. Booton, director excise tax division, Tennessee; Dr. J. C. Morrell, Universal Oil Products Co. who substituted for Dr. Gustav Egloff.

Bessire Heads Paragon In Cleveland

CLEVELAND, Aug. 8.—E. E. Bessire, formerly head of the Major Oil Corp., Lima, O., has sold his interest in that company to his other associates, and become manager of the Cleveland division of the Paragon Refining Co., Toledo.

The Major Oil company, under Mr. Bessire's direction, built two large super service stations in Lima last year, which were planned as community centers, as described in the April 3, 1929, issue of NATIONAL PETROLEUM NEWS, page 82. He was, previous to the organization of the Major company, head of the Radiant Oil & Grease Co., Lima, operating 68 service stations.

Accept Code for Good It Offers; Work To Make It Better, Says Dawes

CHICAGO, Aug. 12

THE code of marketing practices adopted by the American Petroleum Institute July 30 after it had been passed upon by the Federal Trade Commission should not be regarded as furnishing a complete, ready made cure for the evils that afflict the marketing branch of our industry.

It does, however, offer the opportunity for immediate correction of certain practices and usages which are generally agreed to be bad and it does furnish a basis or starting point from which further improvements can be worked out through careful cooperation and conscientious effort of the oil companies.

No company or individual should be discouraged with the code or should hesitate to support it because it does not cover every possible point that arises in the marketing of petroleum products or because it does not furnish the answer to many delicate and controversial questions which confront the trade.

The industry should indorse it heartily, live up to its provisions and strive to bring about a solution to the other vexing conditions for which the code does not yet provide the cure.

This is the opinion of Henry M. Dawes, president of the Pure Oil Co., and chairman of the Middle Western Regional Committee of the Institute, charged with administration of the code. The middle western district comprises the following states: Ohio, Wisconsin, Indiana, Minnesota, Michigan, North Dakota, South Dakota, Illinois, Missouri, Nebraska and Iowa.

Mr. Dawes on Aug. 1 sent out a letter to each of the men who has consented to act as state chairman in the respective states, calling a meeting which was held Aug. 8 at the Pure Oil offices in Chicago. The general committee for the middle western district is composed of the following men: Henry M. Dawes, Pure Oil Co., Chicago, chairman; H. B. Earhart, president White Star Refining Co., Detroit, vice chairman; E. G. Seubert, president Standard Oil Co. of Indiana, Chicago; U. de B. Daly, president Shell Petroleum Corp., St. Louis; W. T. Holliday, president Standard Oil Co. of Ohio, Cleveland; R. S. King, president Refiners Oil Co., Dayton; John Edwards, Paragon Refining Co., Toledo; F. B. Fretter, president National Refining Co., Cleveland, J. J. Johnson, Johnson Oil & Refining Co., Chicago; A. S. Close, Hickok Oil Corp., Toledo; Sheldon Clark Sinclair Refining Co., Chicago; H. C. Smither, Indian Refining Co., Lawrenceville, Ill.

Mr. Dawes, in his letter, explained the responsibilities resting on the state committees as follows:

"First, through explanation of the code and its objects to bring about adherence of all possible participants within each district, and to secure proper publicity as to the results which it is hoped to accomplish through its operation.

"Second, to carry on the local administration of the code. This is a matter of vital importance and involves the success or failure of the movement."

AT THE meeting held Aug. 8 Mr. Dawes, as chairman of the regional committee discussed appointment in each state of a sort of executive committee of five members from the membership of the state committee.

The executive committee for Iowa was the only one definitely appointed and approved. This committee consists of: James M. Cushman, International Oil Co., Des Moines, chairman; C. M. Swanson, Sinclair Oil Co., Des Moines; H. A. Munson, Standard Oil Co. of Indiana, Des Moines; A. L. Lommel, Bartles Shepard Oil Co., Waterloo; H. E. Wormhoudt, Independent Oil & Gas Co., Des Moines.

To quote Mr. Dawes: "This committee of five in each state will act as a committee of conciliation, and disputes will be submitted to them, upon which they will issue rulings in accordance with the resolution of the American Petroleum Institute.

"It should be noted that this committee, subject to certain veto powers to be exercised by the central committee of the institute, may have the right to declare the code inoperative in certain defined geographical limits.

"If, within the limits of a certain city, for example, practices inconsistent with the principles of the code are carried on to such an extent as to make it unfair and impractical for those who adhere to it to carry on their business, this committee may release them from their obligations in this limited section until normal conditions are restored."

In Mr. Dawes' opinion, this power conferred by the code upon the state committees to isolate, or quarantine, as it were, a city or district where a price war or other bad marketing conditions exist, is one of the most important features of the code inasmuch as it is expected that such action will tend to keep a bad situation from spreading over a whole state or marketing territory, and make it easier to restore normal conditions.

THE chairmen of the state committees are: P. D. Sweney, Sweney Gasoline & Oil Co., Peoria; Iowa, James M. Cushman; Michigan, H. H. Ragle, Michigan Oil Men's Association, Jackson; Minnesota, Paul E. Hadlick, Minnesota Petroleum Association, Minneapolis; Missouri, W. T. Atkins, Skelly Oil Co., Kansas City; Nebraska, Charles M. Sutherland, Nebraska Independent Oil Men's Association, Lincoln; Ohio, W. A. Milne, Ohio Petroleum Marketers Association, Columbus; Wisconsin, J. M. McLaughlin, Bartles Maguire Oil Co., Milwaukee.

Jobbers Meet to Study Code of Ethics

SUPERIOR, Wis., Aug. 12.—A Code of Ethics meeting will be held in Superior, Wis., on Monday, September 9, commencing with a noon luncheon at the Androy Hotel ballroom.

Speakers have been invited owing to the general desire upon the part of the jobbers to learn something regarding the details of the code of ethics as promoted by the American Petroleum Institute and approved by the Federal Trade Commission through its trade practice conferences.

Speakers are Edward C. Laughlin, president of the Northwest Petroleum Association, Roy L. Brecke, state supervisor, Wisconsin state oil inspection department. Paul E. Hadlick, secretary of the association will talk on the interpretation of the code of ethics and his brother, Elwin E. Hadlick, counsel for the association will give the legal aspects of the code.

Reservations are being mailed Mr. J. P. Deegan, Northwestern Oil Co., Superior, Wis., for a space at the luncheon in advance so that the hotel can be guaranteed the exact number of guests to expect.

Review of Late Production News

PRODUCTION, which for the past 13 weeks has steadily mounted to new peaks, fell off during the week ended Aug. 10. The week's daily average output was 2,896,000 barrels, according to the American Petroleum Institute, or 12,600 barrels less than the week ended Aug. 3. It was 271,250 barrels more than the daily average of the week ended May 11 when the last previous drop occurred.

Crude oil imports gained 7286 barrels on daily average, totaling 256,571 barrels the past week. Total new crude supply fell to 3,152,571 barrels, a drop of 5314 barrels.

Gray county in the Texas Panhandle made the largest gain of the week, going up 10,400 barrels on daily average, while Santa Fe Springs declined 8000 barrels. Smaller declines in several other fields helped to bring down the country's total for the week.

St. Louis pool declined 3450 barrels; Pecos county 3400 barrels; Pierce Junction 3200, Spindletop 2000 and Elwood Goleta 2500 barrels.

Oklahoma City pool gained 2450 barrels and Barbers Hill 2100 barrels.

Oklahoma-Kansas

THE Mid-Continent passed an unusually quiet week. No wildcats of significance were reported in either Oklahoma or Kansas. The Oklahoma City pool added another well, good for close to 5000 barrels initial production, but being an inside location, it added no new territory to that already considered proven. The Sinclair-Amerada "gasoline" well on the southeast edge of the field was killed during the week with water. It is to be deepened soon to the siliceous.

Oklahoma City's new well was the Indian Territory Illuminating Oil Co. et al. No. 1 S. Bodine, NW of 30-11N-2W, which blew in at a total depth of 6475 feet. With the new well producing for but 18 hours of the 24, the gage for the day ending seven a.m. Aug. 10 amounted to 35,497 barrels from 10 wells.

A McPherson county wildcat drilled by the McPherson Oil & Gas Co. appears as a likely producer when completed. The well topped the chat on top of the Mississippi lime at 2972, and 3009 was making 5 million cubic feet of gas per day, and spraying oil.

California

NEW completions that added nearly 30,000 barrels of flush oil to the output of Santa Fe Springs caused the daily average production for the state to register a slight rise.

Current production in this country by pools is found on page 113.

Even as the time approaches for the enforcement of California's new gas law—September 1—which it is hoped will act in a roundabout way to curtail the production of oil, operations are under way to test the third Clarke sand at Santa Fe Springs.

Approximately 100 wells located in a wide strip around the main area of production have either been located or are drilling at various depths. All of these wells have the deepest Clarke zone as their objective.

Long Beach continued to hold its own with an estimated production of 178,000 barrels from 900 wells, 127,000 of which is coming from 380 wells in the deep zones. Shell Oil Co. secured the largest producer for the week when it completed its Patton Wilson No. 9 for 600 barrels from a depth of 6585 feet.

Leasing and drilling activity in the Ventura Basin and San Joaquin Valley fields is increasing and it is expected that some discoveries will be made that may materially increase the state production of oil.

Texas, New Mexico, Louisiana

THE second well to tap the Pennsylvanian producing horizon in the Big Lake field of Reagan county, West Texas, will be the Big Lake Oil Co.'s No. 131 University, sec. 1, block 2, due for completion about Oct. 1. It was last reported drilling in shale and lime shell at 7940 feet. The well is less than a quarter of a mile southwest of the B-1 University of Texon Oil & Land Co., now controlled by Continental Oil Co., which reached a new production high of 2750 barrels daily of 57 gravity oil, Aug. 5, from depth of 8523 feet.

Geophysical mapping of the Big Lake field by use of magnetometer and torsion balance instruments indicate that the subsurface structure is conformable throughout with the structure at the older 3000-foot producing level.

In Lea county, New Mexico, Humble Oil & Refining Co.'s No. 1 Bowers, 30-18S-38E, had a gas blowout of 10,000,000 cubic feet at 2772 feet. Midwest Refining Co.'s No. 1 Gregory, in 31-25S-37E, tested 7,000,000 cubic feet of gas at 3265 feet.

Louisiana operations were of local significance only.

Wyoming, Montana

ROCKY Mountain region is experiencing an era of deep drilling. In Wyoming at least half a dozen deep tests are either under way or scheduled to start within the next few weeks. Montana, Utah, Colorado and New Mexico each have one or more deep tests drilling below one mile in depth.

Production from the various fields in the Rocky Mountain states has continued to hold around 75,000 barrels daily for several months, the new completions continuing to take care of the natural decline. Midwest Refining company completed a well in the Sundance in the last week, No. 13-SD-3, on the Wyoming Associated's lease, which started with a daily production of 2084 barrels from a depth of 2580 feet.

The Midwest has started drilling its test intended for the granite which is located near the center of the Salt Creek field. It is believed that 12 possible oil bearing sands may be cut in less than 7500 feet. To date no sands in this field have been explored below the Sundance.

1200 Planes to Visit Cleveland During National Air Races

By N. M. Mainpa
N. P. N. STAFF WRITER

CLEVELAND, Aug. 12

VERY nearly the last of the 10 tons of nails will have been driven into the half mile of grandstand at the Cleveland airport, the last spike hammered into the 26 specially constructed buildings, the last shrub planted on the 10 acres of landscaping at field entrances, the last inch of the 10,000 feet of electric and telephone cable laid, and probably the last dollar spent of the $262,000 necessary to bring the 1929 National Air Races and Aeronautical Exposition to Cleveland by the time you read this, as the last of the 250 workmen gathers up his tools and departs wearily toward his Cadillac to go home to supper.

All wings turn toward Cleveland on the morning of Aug. 24 when 1200 airplanes begin their 10-day symphony of zooming motors as a prelude to the opening of this year's air races at the municipal airport and the aeronautical exposition at the municipal auditorium here. Aug. 24 to Sept. 2 are the dates.

Cross-country air races starting from nine different parts of the country, parachute jumping contests, glider flights, relay races, a non-stop flight from the Pacific Coast to Cleveland, acrobatic and night flying exhibitions, not to say anything of the maneuvers of the Army and Navy, and many other events, are scheduled for the meet. Two unique features in this year's races will be the first transcontinental air derby for ladies and the first blimp race ever held. Needless to say, there will be on hand many famous flyers and colorful personalities who have made aviation history.

Uncle Sam's crack military skyfighters, the American Eagles, will be there, to show a thing or two as to what's what in the air with 18 pursuit and 18 attack airplanes, nine bombardment and three transport planes, which will be in charge of 58 officers and 62 enlisted men.

Upholding the glory of the U. S. Navy and Marine Corps, will be 18 planes of the former and six fighting planes of the latter.

Many oil companies operating planes will send them to the meet, and some have signified their intention of actively taking part in the events. Among these will be the Union Oil Co. of California, the Standard Oil Co. of Ohio, and possibly Capt. Frank M. Hawks, superintendent of aviation for The Texas Co., who, one of today's newspaper reports says, will take part in the "Famous Pilots' Glider Derby."

The Union Oil Co. of California, Los Angeles, will be entering Miss Marvel Crosson in the first transcontinental air derby for women, starting from Santa Monica, Calif., and arriving in Cleveland Aug. 26. Miss Crosson, who is employed by the Union company, broke the women's altitude record in May, having ascended nearly 24,000 feet, as compared with 18,000 feet, the record established last December by Lady Mary Heath, British flyer.

The largest contingent of oil company planes will come from the eastern headquarters of The Texas Co. There will be six of them, flying from New York, headed by Capt. Hawks, head of that company's aviation department, and maker and breaker of non-stop transcontinental speed records. He will be accompanied by all of the company's aviation salesmen. A box in the grandstand has been retained by that company from which Capt. Hawks and his party will view the events. Gasoline and oil may be furnished to some of the participating planes, Capt. Hawks said.

From the east will also come two planes of the Standard Oil Co. of New Jersey, its Lockheed and Robin planes. These will be piloted by Major E. E. Aldrin, head of the company's aviation department, and Capt. R. E. Ellis. Other members of the company's engineering and technical staffs will accompany.

MAJOR ALDRIN will attend as a member of the aeronautic sessions of the advisory board of the Society of Automotive Engineers and will preside at the joint conference of aircraft engine manufacturers and fuel and lubricating committee of the Aeronautical Chamber of Commerce.

From out of western skies will descend planes of the Standard Oil Co. of California, the Associated Oil Co., and possibly the Richfield Oil Co., in addition to that of the Union Oil Co.

S. S. Chadderton, head of the aviation department of the Standard Oil Co. of California, San Francisco, will fly from that point in the company's Boeing plane. The company does not plan to have an exhibit at the exposition in the municipal auditorium and did not know at the time of writing whether it would furnish supplies to contesting planes, according to Philip H. Patchin, assistant to the president.

THE Associated Oil Co. will have its Boeing plane on display at the field. That company has furnished its products to the Emsco tri-motored monoplane, the single-motor endurance plane, and the two-place training plane entered by the Emsco Aircraft Co., Downey, Calif., in the races, according to E. B. Bronte, manager of the Associated company's aviation department.

That company will also have a complete display of its products at the exposition, including a pictorial story of its aviation activities on the Pacific Coast. It will also have a box in the grandstand at the airport.

Another exhibitor from California will be the Richfield Oil Co., Los Angeles, but the company did not know yet whether it would furnish supplies to contesting planes or take part in any of the events itself.

The "Gold Shell," tri-motored Fokker plane of the Shell Petroleum Corp., St. Louis, will represent that company at the meeting, as will four or five departmental managers, according to George A. Volz of that company. Shell aviation gasoline and engine oil will be on hand at the field and the company has taken two exhibit booths at the exposition, as well as advertising space on the program.

An action exhibit of Stanolind aviation products will be on display by the Standard Oil Co. of Indiana, in charge of H. K. Apel and J. P. Porter of that company's aviation department, according to N. H. Reed, advertising manager.

One or more airplanes of the Naturaline Co. of America, Tulsa, are expected at the air meet, according to C. W. Anderson, sales manager. A booth at the exposition has been taken by that company which will serve more of a meeting place for customers, prospects and friends where they may go to rest and

meet company representatives, Mr. Anderson says.

The Texas Pacific Coal & Oil Co.'s plane will drop in from Fort Worth, but it will not take part in any of the events, according to F. D. Bostaph, sales manager. An exhibit in connection with that of the Standard Oil Co. of Ohio, distributor for that company's motor oil in Ohio, has been arranged.

Representing the Independent Oil & Gas Co., Tulsa, a recent airplane purchaser, will be Tom D. Park, manager of the aviation department, who will arrive on Aug. 25 in the company's new Wasp Lockheed monoplane.

Several Cleveland oil companies will be represented in various ways at the air meet.

The Standard Oil Co. of Ohio—will have its plane on hand to act as a "pilot" plane for the convenience of air race officials and for officials of the Ohio Chamber of Commerce. It will be entered in the All-Ohio derby which will circle the rim of Ohio. The company will furnish gasoline and oil for contestant planes only, according to A. M. Maxwell, vice-president in charge of sales.

The Pocahontas Oil Co., Cleveland, is offering $10,000 in special prizes to those planes using Veedol motor oil which first arrive in Cleveland on the non-stop flight from San Francisco, according to N. F. Squire, general sales manager. First prize is $2500 in cash and goes to the plane holding the highest place among those using Veedol. Second prize is $1000 and third $500. To the solo endurance flyer using Veedol who arrives at the highest place will go $2500. These prizes are being offered in connection with the Tide Water Oil Co., for which the Pocahontas company is distributor in Ohio.

The latter company is one of the Cleveland oil companies that has underwritten the air meet, having expended $3000 for that purpose.

Other Cleveland oil companies that will have representatives at the meet will be the Cities Service Oil Co., the Columbia Refining Co., and Canfield Oil Co. All of these companies have arranged for boxes in the grandstand at the air field.

John Nelson, sales manager, jobbers department, of the Canfield Oil Co., and A. C. Ellinger, manager of the northern Ohio sales department, will greet customers in that company's box, according to H. M. Carruth, secretary.

The Columbia Refining Co., Pennzoil distributor, has had two men selling motor oil to contestants in the air races the past weeks. It has recently completed painting the word Pennzoil in letters 15 feet high on the Stewart Aircraft Corp. hangar at the Cleveland airport as a piece of advertising for itself, according to Burt Zimmerman, manager.

--Aerial Surveys, Inc.

Aerial view of Cleveland

Oil Companies Demanding Refund Of Unlawful Freight Charges

WASHINGTON, Aug. 12

A SCORE of marketers of oil and consumers of oil in Ohio and Indiana, within the week, have filed complaints with the Interstate Commerce Commission demanding the refunding of thousands of dollars they allege the railroads carrying refined products from the Mid-Continent and related oil freight rate groups and from refineries in Illinois along the Mississippi River to Ohio and Indiana points have unlawfully exacted from them. The cases were brought by a traffic bureau at Dayton, O.

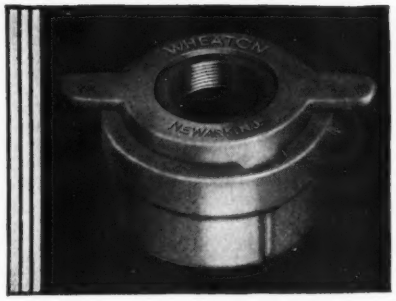
The complaints are not in themselves illuminating on the point in issue. Informal proceedings preceding the filing of formal complaints charging violations of the interstate commerce law, however, show that the gist of each complaint is that the receivers of the petroleum products in question were entitled, because of loopholes in the tariffs of the railroads, to lower charges than were collected.

A suit filed in the federal court for the northern district of Indiana by the Standard Oil Co. of Indiana, brings the same or closely related question into the court. The Standard alleges that the Interstate Commerce Commission dismissed two cases brought by it demanding return of overcharges on the theory that the cases involved judgment as to the reasonableness or other quality of the rates charged when as a matter of fact the only questions involved pertained to the construction of the language used in the tariffs—a pure legal proposition and not one involving the administrative discretion or judgment of the freight rate regulating body. The Standard therefore asks to have the orders of the Commission set aside so that the latter will be forced to pass on the pure question of law—what did the tariffs in question provide in the way of rates?

These controversies involve millions in freight rates, the estimates running to about $16,000,000. The National Refining Co. also had a similar case before the Commission estimated to involve $4,000,000. It also lost its fight before the rate body.

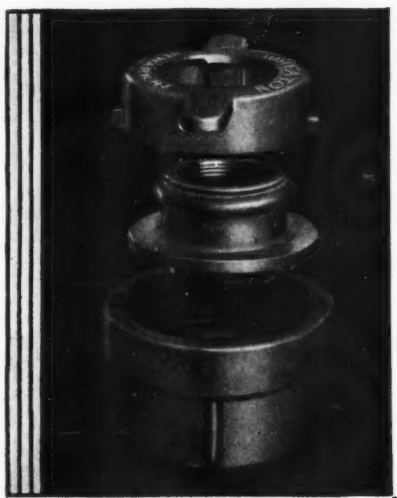
Many veteran traffic men are still of the opinion that the Commission, in dismissing the Standard cases, disregarded the law as it had laid it down in dozens of open route cases, in order to prevent an order directing the railroads to return millions to the Standard, the National and other shippers.

The cases are known as open route cases, hundreds of which have been decided in favor of shippers, generally shippers of lumber from the south to the north.



Here the coupling is shown locked in position after a connection has been made.

This *New* WHEATON COUPLING for *Underground Storage Tanks* SAVES MONEY



The male and female couplings, with the *double tapped* pipe connection between, are shown here.

—Costs Less
and
Reduces Time and Labor
in making
Foot Valve Corrections

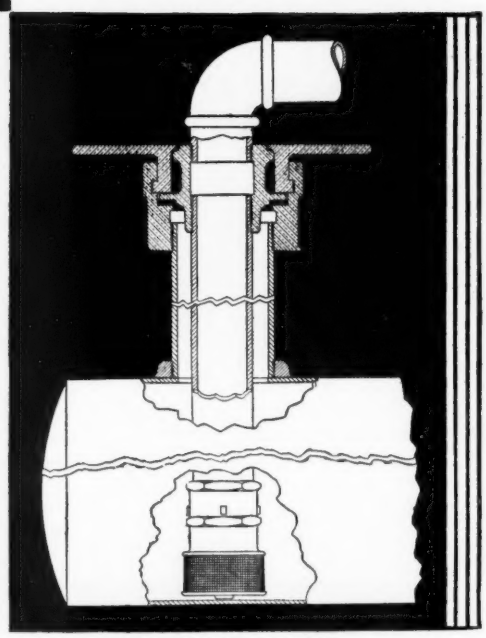
THIS *new* coupling—designed by WHEATON especially for Underground Storage Tanks—effects a *double saving*, because in the first place it *costs less*, and in the second place it saves both *time and labor* in getting at the foot valve. There is no digging, no unscrewing of parts. Corrections are made in *one-fourth* the time usually required.

The female coupling is attached either to a 3½″ nipple or directly to the flange of the tank. The *double-tapped* pipe connection—which is seated in the female coupling—quickly connects the foot valve with the pipe line. The male coupling slips down over the pipe connection, and its lugs lock into the female coupling. A part turn of the wings makes the connection *tight*.

Send for a sample of this new Wheaton coupling. Give it a 30 or 60 days' trial. If you are not entirely satisfied, you may return it for credit or refund. Prices: 3½″ Coupling, with 1½″ pipe connection—$5.50; 3½″ Coupling, with 2″ pipe connection—$6.50. Write for discounts.

A. W. WHEATON BRASS WORKS, NEWARK, N. J.

Empire Brass Mfg. Co., Ltd., London, Ont.
Canadian Manufacturers and Distributors



Wheaton

FAUCETS · VALVES · JOINTS · COUPLINGS · FILLERS · NOZZLES · FITTINGS

THE "dog days" are here. Tulsa, in company with all Oklahoma, swelters in the summer sun. Calling on individuals for information for stories about this or that we are generally met with the reply, "He's on his vacation." No rain falls on the farmer or the drilling contractor, the just, or the unjust. Even the regular conductor of this department is trying to fool some benighted Wisconsin fish into thinking that the worm on his hook is really ice cream, or a bottle of beer, or whatever it is that specially attracts Wisconsin fish. Which explains our following in his footsteps so closely. And that reminds us of what a rather charming young lady said to us on the last occasion we danced with her. She "didn't mind our following in her footsteps, if we would just wait until she got out of them."

* * *

As a general thing the oil country abounds in good bird dogs, many oil men being enthusiastic hunters, as well as handlers and breeders of hunting dogs. Among the well known oil men whose hobby is the bird dog is E. E. Kirkpatrick, head of the Tulsa office of T. B. Slick.

Mr. Kirkpatrick's 16 months old puppy "Southern Breeze" recently won third place in the derby of the Tri-State field trials at Wheeler, Texas. Although he has long owned a kennel of good bird dogs, this is the first time that Mr. Kirkpatrick has ever entered one of his dogs in a field trial. Mr. Slick is also well known as an ardent huntsman and bird dog fancier.

* * *

How's this for progress? A recent Associated Press dispatch stated that the Saunders "Drive it yourself" system has organized a companion "Fly it yourself" system, with headquarters at Kansas City, Mo. Plans call for the purchase of 100 planes as a starter. Guess we'll have to take that flying course after all. We can expect the boss to say most any day now, "Might as well get a plane and pick up that story of the salt water well with live fish in it down in Flat Tire county."

* * *

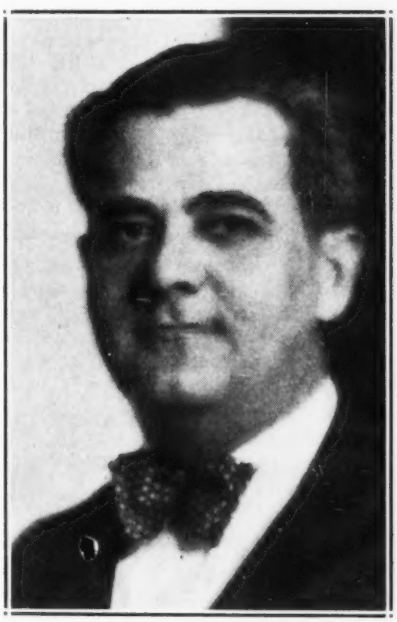
Dillon, Read & Co., well known financiers, are again active in oil company finance. The firm has underwritten a stock issue to present stock holders of the Sunray Oil Corp., one of the more active of the small producing companies. Dillon, Read's other oil company interests have been the Union Oil Co. of California and the Amerada Petroleum Corp.

* * *

Almost worth a "Believe it or not" cartoon is the incident which took place in Tulsa recently. Two negroes were arrested, on the charge that they were both drunk, and were both driving the same car at the same time. Wonder if they thought they were going in the same direction.

STAFF Writer John Power is batting for Lawrence E. Smith this week as conductor of this department.

Customers with an aversion to fish stories beware of these columns when Larry gets back on the job about Aug. 28.



J. A. Morgan

Formerly sales manager of the Smith Separator Co. and now a member of the new firm of Camp-Morgan, formed to sell the "Black Gold" separator

Announcement has been made of the withdrawal of the appeal from the federal radio commission's decision denying the use of the cleared wave length now used by KWKH of Shreveport and WWL of New Orleans to KVOO, Tulsa broadcasting station owned by W. G. Skelly, president of the Skelly Oil Co.

* * *

A natural gas pipe line from north Louisiana to St. Louis, Mo., is to be financed by a $16,000,000 bond issue, it has been announced. The Mississippi River Fuel Corp., organized to construct and handle the line, is sponsored by the Standard Oil Co. of New Jersey, the Electric Light and Power Co., Electric Bond and Share Co., Columbian Carbon Co., United Carbon Co., the Palmer Corp., and the United Gas Co. These companies control the outstanding stock of the new corporation, according to newspaper dispatches.

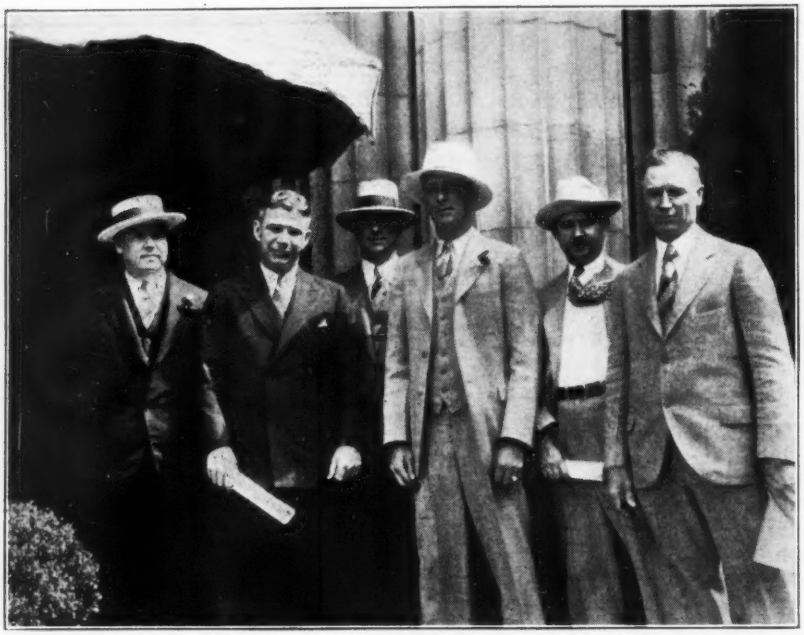
* * *

A new oil field specialties sales company has been formed, according to announcement made this week. Identified with the new company are two men whose names are well known throughout Mid-Continent oildom. C. F. (Heavy) Camp, of the C. F. Camp Co., distributors of Waukesha engines and compressors, and J. A. (Jim) Morgan, well known as the sales manager for the Smith Separator Co. are to head the company, whose trade name is CMCO. (The Lord knows how it is pronounced). Although making its headquarters in the building occupied on East Archer Ave., by the C. F. Camp Co., the CMCO has no connection with Mr. Camp's other interests.

The company was called into being to handle a new separator, called the "Black Gold," which is equipped with a new and patented type of mist extractor. The Camp-Morgan Co. will also handle the Neilan-Schumacher line of regulators and automatic controls.

* * *

L. S. Lantz, formerly production superintendent for the Continental Oil Co. in Oklahoma, and Martin J. Keoughan, his assistant, have left the Continental and have opened an of-



"Caught" at a recent engineering meeting in Tulsa: Left to right, T. A. Creekmore, Summit Drilling Co.; R. K. Huey, general superintendent of production, Shaffer Oil & Refining Co.; J. G. Bischoff, Shaffer; Joe Wolfe, Summit Drilling Co.; Joe Lugar, and C. L. Moss, Shaffer

fice for themselves as drilling contractors and property managers. They are located in the National Bank of Commerce Bldg., Tulsa.

* * *

Joe T. Sweeney, former sales manager in Tulsa for the Continental Oil Co. has left that company and joined the Phillips Petroleum Corp. of Bartlesville.

* * *

Answer to a question in this column of a former issue. Wirt Franklin, well known oil man of Ardmore, and president of the newly formed Independent Petroleum Association of America, has gone to Pasorobles, California, for a conference with Mark L. Requa on conservation. And that's what became of Mr. Requa.

* * *

Fun and frolic for all marked the opening of the newly completed model production camp of the Skelly Oil Co. at Bristow. A reception for President W. G. Skelly and a party of officials, fancy diving, a bathing beauty review, professional and amateur vaudeville acts and a dance were high lights on the program marking the camp's opening.

Among the Skelly Oil Co. employes who took part in the entertainment features were Barney Hayes, chief scout, who is a tenor soloist in his spare time; Howard Lucky, of the land and lease department, who sings baritone, and Hugh Sharp, of the executive department.

The camp, which is considered a model in its efficiency and design, has been building for some time. Under the charge of L. C. Smith, Skelly Oil Co.'s Bristow district superintendent, the camp will be the production, gasoline, and transportation headquarters for Skelly Oil Co. in the Bristow area.

* * *

Robert H. Dott, formerly a subsurface geologist with the Mid-Continent Petroleum Corp. has resigned to join the Sunray Oil Corp. as chief geologist.

* * *

After a long last, the deepest well ever drilled in Oklahoma has been officially marked Dry and Abandoned. The Indian Territory Illuminating Oil Co. No. 1-A Cook, in the SE SE NW of 10-1N-11E, Coal county, has reached a depth of 7890 feet, and is quitting in shale. The well never had an oil showing nor did it have any water below the 9-inch set at 4995, only string of pipe set below the surface pipe.

The well, which was drilled all the way with rotary tools, was started July 20, 1928, was one location west of the No. 1 Cook, which was drilled with cable tools for a year, but made but 1990 feet, being troubled continuously with a cavey hole.

Drilling was practically continuous after the surface pipe was set, save for the time out during the running and cementing of the 9-inch. The well is estimated to have cost $250,000.

* * *

An airplane salesman friend of ours tells us that his livest prospects are drilling contractors. Their operations are scattered over many counties, frequently into several states, and they have found the time saving speed of the airplane is a bullet which exactly fits their pistol.

* * *

Ten Years Ago

From National Petroleum News August 13, 1919.

The Atlantic Refining Co. increased its capitalization from $5,000,000 to $70,000,000. Producers, Refiners and Marketers all show worry over the impending railroad strike, and what it will do to the oil business.

* * *

In July the average daily production of the United states exceeded one million barrels, as it did in June. The Mid-Continent fields contributed 553,000 barrels in June and 580,000 barrels in July—a record. It is thus seen that these weekly reports of steadily declining production are not at all dependable.

Italo and McKeon Oil Properties Merged

LOS ANGELES, Aug. 12.—Italo Petroleum Corp.'s properties will be merged with those of John McKeon, Independent operator, according to a recent announcement of the directors of the Italo Corp. In addition to Italo the new company will absorb the Delaney Petroleum Corp., the Raleigh Oil Corp. (formerly McKeon Drilling Co.), J. E. O'Donnell holdings, and the properties of the Elberta Oil Co.

Italo is to receive $2,400,000 in cash and 57 per cent of the issued stock of the new company which is to have 1,150,000 shares of no par common and $5,000,000 bonded indebtedness covered by 10-year six and a half per cent obligations, and no other liabilities. The working capital will amount to $1,000,000. Daily production of the company will be approximately 16,000 barrels above royalties. A meeting of the stockholders of the Italo Corp. will be held August 23 to ratify the merger.

It is reported that the Pure Oil Co. is interested in the merger and will thereby gain a much sought after entrance into California. Financing has been under-taken by a group of Chicago and New York bankers. The new company will be known as the McKeon Oil Co. with John McKeon as president and general manager.

Has Safety Device for Well Pulling

CHICAGO, Aug. 9.—To overcome the hazard of the ordinary straight end wrench from slipping off the nut in a well pulling job, the Texas Pacific Coal & Oil Co., Fort Worth, has developed an extension socket wrench which allows the employe to stand back a safe distance from the clutch. This eliminates the danger incident to the adjusting of the brake while the engine is in motion, according to the petroleum section of the National Safety Council.

2 miles a day *across Alberta!*

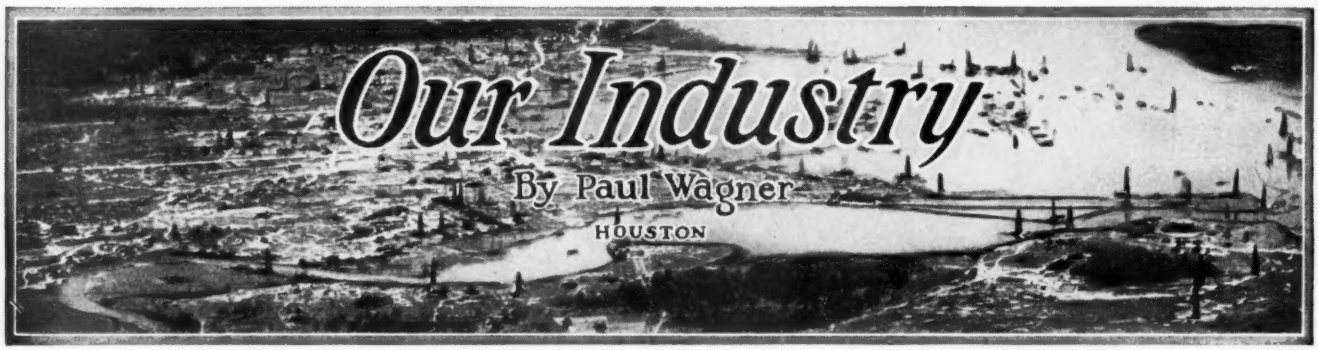
Greenspon's gas line pipe took root in new soil on this job—out at Calgary, Alberta, Canada, where a Canadian natural gas company saved money in buying, and time in installing, Greenspon's Odee pipe. ODEE is always uniform—thoroughly inspected; ends cut square and beveled for perfect joints; prices that really save money. Delivery is always prompt. For any gas or oil pipe or casing requirements, write, wire, or phone for quotations.

Jos. GREENSPON'S Sons

IRON & STEEL COMPANY

Main Office: St. Louis. Branches: Tulsa, New York City, Borger, Tex., Wheatland, Pa.

PIPE FOR ALL PURPOSES



Wesley D. Martin now has charge of the purchasing, warehouse, transportation and telephone departments of the Arkansas Natural Gas Corp., at Shreveport. He succeeded Paul F. McBride, recently named general manager of the Southern Cities Distributing Co., retail agency of the Arkansas Natural. Mr. Martin was transferred to Shreveport from Tulsa.

* * *

Frank Yount of Beaumont, president of the Yount-Lee Oil Co., discoverer of the deep pay development area on the flanks of the Spindletop salt dome, has been spending his vacation period this summer in Colorado.

* * *

Harry W. Berdie, who now heads public relations work of the Richfield Oil Co. of California, with Los Angeles headquarters, was general manager of the American Chamber of Commerce at Tampico before moving to the Pacific Coast about two years ago. Mr. Berdie represented an eastern financial publication at Los Angeles in the interim between leaving Tampico and joining the Richfield organization. He was for years connected with leading newspapers of the United States before entering the field of public relations work.

Harry W. Berdie

One of the oldest present day scouts in the petroleum industry is I. W. Ross of the Prairie Oil & Gas Co., at Lubbock, West Texas. He celebrated his 75th birthday anniversary last May. Mr. Ross has been identified with the industry since 1899, when he helped organize the Reed Oil Co., in the Kern River field of California. He retained management of the Reed organization until its subsequent sale to the Associated Oil Co.

Since 1915 he has scouted western Oklahoma, north and west Texas and the Panhandle territory. His first five years of scouting was with The Texas Co. Then he joined the Producers & Refiners Corp., eventually entering the Prairie organization, where he has been for the last seven years.

* * *

Thomas B. Haines, formerly identified with the Humphreys Corp., in Mexia-Powell development days of East Texas, is now on a special mission to South Africa for the Sullivan Core Drilling Co.

* * *

W. W. McDonald is in charge of recently opened offices of the Arkansas Fuel Oil Co., at Wichita Falls. He will have direct oversight also of geological work of the company in that territory. J. T. Burlingame is in charge of leasing and scouting work and C. R. McKnight looks after valuations.

* * *

H. M. Craig, executive assistant in the Fort Worth division office of the Gulf Production Co., has returned to his post after a vacation spent in the Rio Grande valley.

* * *

R. M. Pitcher, manager of the British American Oil & Producing Co., at Wichita Falls, is spending a few weeks with his family in Toronto. He is due back in Texas about the end of August.

* * *

L. C. Roberts, Jr., is now stationed at San Antonio, assisting Kenneth D. Owen in the geological department of the Southern Crude Oil Purchasing Co., subsidiary of Pan American Petroleum & Transport Co., He was formerly of Fort Worth.

A new report on the geology of Florida has been prepared by C. Wythe Cooke and Stuart Mossom in cooperation between the United States Geological Survey and the Florida State Geological Survey. It has been issued as a part of the twentieth annual report of the Florida survey, which is headed by Herman Gunter of Tallahassee. The report discusses topography, composition of structure and general features of the various formations found in the Florida region.

* * *

W. L. Stewart, Jr., son of the president of the Union Oil Co. of California, has become manager of its production group interests following the administrative changes brought about by appointment of L. P. (Press) St. Clair to be executive vice president. Mr. St. Clair's appointment was previously reported in connection with the retirement of E. W. Clark.

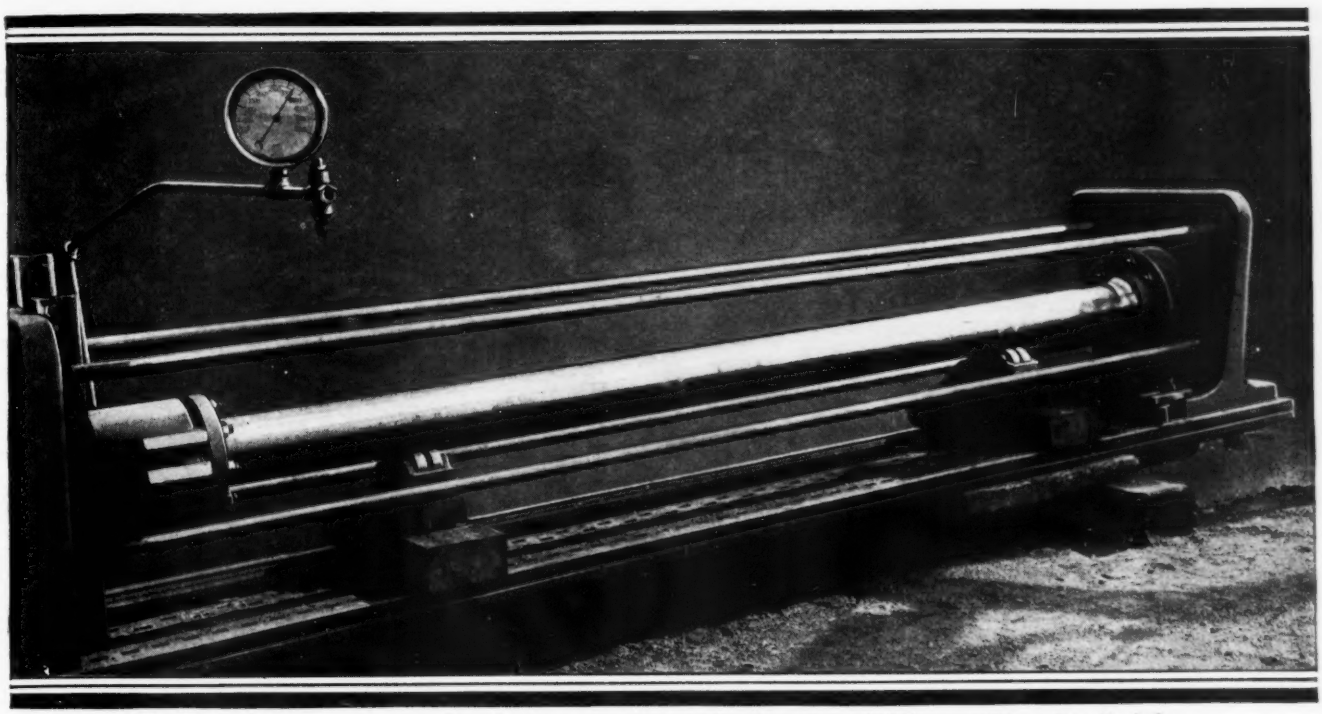
* * *

J. H. Pressley is executive assistant to J. Edgar Pew, vice president and general manager of the Sun Oil Co.'s producing activities in the southwestern United States, with Dallas headquarters. Mr. Pressley is a native of Texas, reared in Milan county and thoroughly at home in the East Texas region. He is widely and favorably known in the petroleum industry.

(*Continued on Page* 50)

J. H. Pressley

Dramatic Evidence
of the superior strength of deLavaud pipe



The above photograph was taken during a hydrostatic bursting test of deLavaud Pipe. Details below.

3,350 lbs. per square inch was the pressure required to burst the 6-inch deLavaud Pipe shown above. This pipe was selected at random from stock, placed in a special test press and submitted to tremendous water pressure from a force pump. Gauge readings were accurately checked.

When the pressure was first applied, the gauge needle moved up quickly to the 2,000 lb. mark. Thereafter it advanced more slowly to a reading of 3,350 lbs. per square inch—*a pressure reading fully 25% higher than could possibly be obtained with pit cast pipe designed for the same service.*

The remarkable strength of deLavaud Pipe is due to the dense, close grained structure of the metal, and to the metal's freedom from slag and blow holes. deLavaud Pipe is made by pouring molten iron into a rapidly revolving cylindrical mould. Centrifugal force holds metal against sides of mould, driving out impurities with a pressure resulting from a force *40 times greater than gravity.*

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Oklahoma City Pool Gets New Well. Mid-Continent Areas Quiet

By John Power
N. P. N. STAFF WRITER

TULSA, Aug. 10

A SINGULARLY quiet week was that of Aug. 5 to 10 in the Mid-Continent. No large wildcats were completed to be hailed as the openers of new pools. Seminole production continued erratically downward, a state of affairs which many believe will be continuous for some time. Such wildcat showings as were reported from Kansas were regarded as without other than local significance.

The Oklahoma City pool, darkest cloud on the overproduction horizon at present, added a new producer in the deep siliceous lime pay. It was, however, strictly an inside location, being practically surrounded by production in the same formation. The new well, Indian Territory Illuminating Oil Co.-Foster Petroleum Corp. No. 1 Alice Bodine, NW of 30-11N-2W, blew itself in with an initial production of 200 barrels per hour at a depth of 6475.

This brings the total number of producing wells to 10, eight of which are in the siliceous lime and two in the stray sand found in the detrital zone by the Coline Oil Co. No. 1 Olds, and the Franklin-Cromwell-I.T.I.O.-Foster No. 1 Johnson. Two wells, formerly carried as producers, have been dropped from the roll.

They are the Sinclair-Amerada No. 1 Kinter, NW SE of 30-11N-2W, on the southeast edge of the field, and the I.T.I.O.-Foster Pet. No. 1 Watters, NE NW NE of 25-11N-3W, two locations southwest of the discovery well. These wells were both of the "gasoline" variety, shut in in compliance with the order of the Corporation Commission. As soon as the gas has been killed in these wells they are to be deepened to the siliceous lime. In the meantime, they are on the inactive list, and are no longer regarded as completions.

The I.T.I.O. et al. No. 1 Johnson, second well to get production in sand found in the detrital zone, remains the field's largest well. Cramped for tankage and pipe line facilities, the well has never been opened to a full 24-hour gage. On the basis of 1½-hour tests it has shown a potential of considerably better than 15,000 barrels per day. At present it is producing 3500 barrels per day through one ½-inch and one ¾-inch choke, against a back pressure of from 1350 to 1700 pounds.

A little less than three-quarters of a mile separates the two sand wells, the No. 1 Johnson being that distance south of the No. 1 Olds of the Coline. The following table gives production of the pool by wells.

Company	Farm	Well No.	Location	Production
Coline Oil Co.	Olds	1	24-11-3W	4091 barrels
I.T.I.O.-Foster	S. Bodine	1	30-11-2W	3486 " (18 hrs.)
I.T.I.O.-Foster	Button	1	19-11-2W	5132 "
I.T.I.O.-Foster et al.	Johnson	1	25-11-2W	3233 " (choked)
I.T.I.O.-Foster	Hemming	1	24-11-3W	3475 " 274 water
I.T.I.O.-Foster	Fee (Discovery)	1	24-11-3W	1678 " 614 water
Mid-Kansas	Fortson	1	24-11-3W	3776 "
Mid-Kansas	Fortson	2	24-11-3W	4066 "
Prairie-Slick	Hiddleston	1	19-11-2W	3480 "
Sinclair	Stamper	1	30-11-2W	3080 " 2000 water
	Total	10		35,497 "

Development of the field continues apace. Seventy-three active locations are now reported from the field. In spite of the field's proximity to the city, field camps are building, and the deeply rutted, sandy roads are thronged with traffic. Especially is this true at a time when a new well is scheduled to be drilled in. The loyal citizenry of Oklahoma City still take a parental interest in the pool, and throngs of sightseers flock to see the wells completed.

"Innocent bystanders" are not the only ones to visit the field. The pipe line work is surging ahead under the impetus received last week when announcements were made of the enlarging of such lines as were then serving the field. The Oklahoma Pipe Line, (by the Carter Oil Co., out of the Standard of New Jersey) has under way a new 8-inch line from the Cushing district. When the pipe line work now under way is completed and ready to operate at capacity the field will have a daily pipe line capacity of around 90,000 barrels, or close to the 100,000 barrels daily production which some have estimated as the field's possible peak.

Fishing jobs continue to delay several completions which ordinarily would have been finished by now. Shell Petroleum Corp. No. 2 Petty in the SW SW NE of 30-11N-2W, is one such well, which has been swabbing about 40 barrels daily of oil and mud during the progress of a fishing job in the top of the pay. About ten wells are below 6000 feet, with many of them pounding away at the hard lime shell, immediately on top of the pay.

The rest of the state maintained a dignified calm during the week, although weary for the time being of sensational developments and new pools.

The appearance of water in the Signal Oil Co. No. 1 Bond, outlying Wilcox producer in the Sasakwa pool, as well as the dry holes close in to some of the other production, have rather knocked props out from under that new field, which at one time looked as though it might easily attain major importance. There are several wells due for completion, however, in the next few weeks which may revive interest in the district should they make large producers.

OF THE Seminole areas, the most active at present from the point of number of wells drilling is the area between the St. Louis and Pearson Switch pools, of eastern Pottawatomie county. Several excellent Hunton lime, and a few good Simpson wells have been completed. Typical of these is the Houston Oil Co. No. 3 Wyatt, NE SW of 17-7-4, which made 50 barrels the first 30 minutes after drilling the Simpson from 4160 to 4185 feet.

Sinclair's No. 1 Kelly "A," in the NE NW NE of 2-7-4, made 1240 barrels from a total depth of 4335. Thirteen hours during the time this gage was taken the well was on the air lift, the remaining 11 hours on the swab.

Independent & Darby have what

appears as the makings of a well in their No. 1 Curely, NW SE NW of 22-7-4, which at last reports was making 23 million cubic feet of gas per day and spraying oil from the top of the Hunton lime encountered at 3602 and drilled to a total depth of 3714 feet.

The Chandler area, to which attention was drawn recently by the Magnolia No. 1 Decker in the SE SW SE of 8-14-4, Lincoln county, has failed so far to stir up any really intensive drilling campaign. The well, which has fallen off nearly 40 per cent during the past week, is now making around 550 barrels daily, and is cutting its production about 7 per cent. The well is now flowing by heads.

Kansas failed to turn in anything that could be considered startling. The Aladdin Oil Co. No. 1 Baysinger, NE SW of 24-27-3E, Butler county, which was reported in last week's issue of NATIONAL PETROLEUM NEWS as showing for a well, has been put on the pump, with an initial production of 145 barrels daily.

The McPherson Oil & Gas Co. No. 1 Chinsberg, C NW NW 18-19S-2W, a wildcat in McPherson county, is another test showing for a well in the top of the chat encountered sporadically throughout this section of the state. Getting a show of gas at 2972-96, the well was drilled deeper to 3009, at which depth the gas increased to about 5 million cubic feet per day, and the well began to spray oil. It has been shut in to await the erection of tankage.

Sedgwick county continues to lead the state in the number of operations under way. A count of drilling wells in Sedgwick shows 68 active, and eight shut down at various stages.

* * *

Notes on the Week

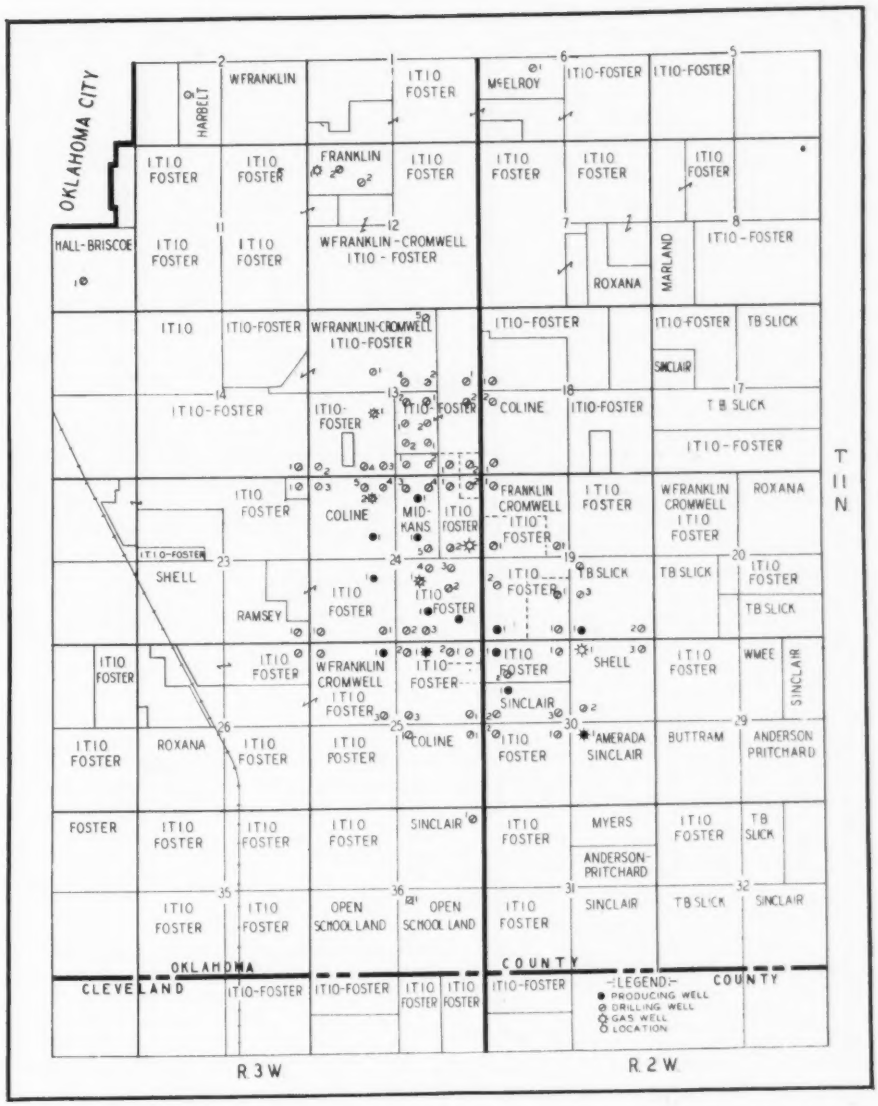
Just announced is the Sinclair Pipe Line Co.'s entry into the Oklahoma City pool. A survey is to be made at once for an eight-inch pipe line from the Capital City pool to the Sinclair's Seminole system, a distance of about 30 miles. The line will have about 20,000 barrels capacity. This makes the fourth line operating out of the field, the others being the Empire, Prairie, Oklahoma.

* * *

Crude oil deliveries by the Prairie Pipe Line Co. totaled 7,048,297.47 barrels for the month of July, a daily average of 227,364 barrels. This is a new high mark, the previous record having been the same company's deliveries during the month of June, when the total was 6,482,036.24 barrels, a daily average of 216,067 barrels.

* * *

A last minute report from the field states that the Sinclair-Amerada No. 1 Kinter, the big gas well on the southeast edge of the field, has been killed successfully with water, introduced into the well by the "lubricating" method. As soon as the lost string of tools has been fished from the hole, the gas sand will be mudded off and the well deepened to the siliceous lime pay.



Map of Oklahoma City area showing development as of August 10

Consolidation of Sales Groups Is Completed

TULSA, Aug. 12.—A new Continental Oil Co. sales organization with division headquarters ranging from New York City to Butte, Montana, was announced by Edwin S. Karstedt, vice-president in charge of sales for the Continental. The personnel of the new organization was drawn from the sales staffs of the Marland Refining Co., and the Continental, which recently merged.

Operating under Mr. Karstedt are K. M. Hollister, assistant vice-president in charge of real estate titles, leases, contracts, etc., and Lawrence R. Milne, general sales manager. Both occupied similar positions under the old Continental company. Mr. Milne's assistants are O. B. Lloyd, formerly assistant sales manager for the Marland at Ponca City, and L. T. Cramer who has held the same position with the Continental. Staff assistants to Mr. Milne include C. C. Warner, advertising and B. E. Sibley, chief technologist.

The sales territory is divided into four major districts. H. J. Kennedy, formerly sales manager of the Marland Co., will be sales manager in charge of the New York office, his territory including New England and the Atlantic seaboard. Three Continental district managers, J. S. Curtis, J. T. Strong and J. P. Anthony will command the other three headquarters at Ponca City, Denver and Salt Lake City respectively.

OUR INDUSTRY

(*Continued from Page* 45)

John M. Sandlin, Jr., has been transferred from Shreveport to San Angelo by the Arkansas Fuel Oil Co., and will handle its business in the Permian salt basin region of West Texas and southeastern New Mexico.

* * *

James L. Taylor, president of the Taylor-Link Oil Co., of Houston and San Angelo, spent his vacation near Cibola, on the Gunnison river, in Colorado.

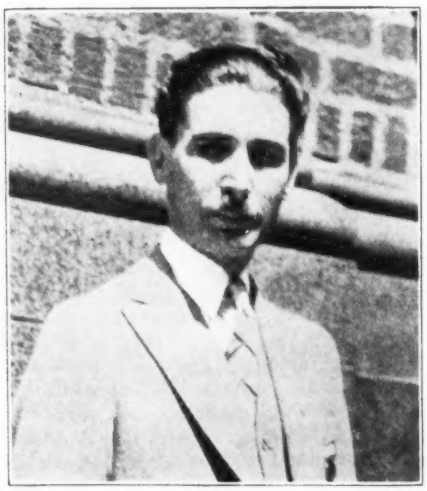
* * *

Edgar Kraus, division geologist of Atlantic Oil Producing Co., in West Texas, makes headquarters at San Angelo, where he directs work in the Permian salt basin province. Before his transfer to San Angelo, several years ago, he was for a time at Enid, Okla., for the Atlantic. Prior to that he was in Gulf Coastal territory at Houston.

At one time he was a consulting geologist in Eastland, Texas. Afterwards, he was identified with Pierce Petroleum Corp., before joining the Atlantic. He was educated in the public schools of New York City, where he was born in 1896. His higher education came from the Columbia School of Mines, where he was graduated with an E. M. degree in 1917. He holds membership in the American Association of Petroleum Geologists and the American Institute of Mining & Metallurgical Engineers.

* * *

John H. Asbury, formerly Abilene district scout of the Marland Production Co., in Texas, is now stationed at Saginaw, Mich., where he represents Shell Petroleum Corp.



Edgar Kraus

W. T. Thom, Jr.

William T. Thom, Jr., long the head of the oil and gas division of the United States Geological Survey, now on leave of absence teaching at Princeton, holds an enviable record for federal service. After his graduation from Washington & Lee University with an S. B. degree and from Johns Hopkins, where he obtained his Ph. D., Mr. Thom served two years on the District of Columbia water department before joining the U. S. G. S., in 1912.

He served successively as rodman on the survey, as geologic aid, assistant geologist, associate geologist and geologist. He was also chief of the planning section, bureau of statistics, United States Fuel Administration, in 1918.

Dr. Thom is a member of the American Association for the Advancement of Science, the Geological Society of America, the Washington Academy of Science, American Institute of Mining & Metallurgical Engineers, American Forestry Association, Gamma Alpha and Pick and Hammer clubs, among others. In war time, he was a member of the American Friends Service Commission and of the Relief Unit in Vienna.

* * *

W. W. (Jack) McCarty is now production superintendent of the Pandem Oil Co., in the Wichita Falls district. He was formerly connected with the Gulf Production Co., as scout and land man, in that territory.

* * *

Ben R. Davis, formerly of Fort Worth, has been transferred to Odessa, Texas, where he will be chief clerk in the West Texas division offices of The Texas Pipeline Co. E. E. Weller succeeded him at Forth Worth.

N. R. Spaugh, who has charge of the Waterloo, Ill., producing district of the Pure Oil Co., has been transferred to Michigan. Ed F. Clagett is in general charge of the company's Michigan operations and W. F. Weichers handles land department affairs with Saginaw offices.

* * *

H. W. Sharp, formerly stationed at Lubbock, Texas, has been transferred to the Muskegon, Mich., territory by the Shell Petroleum Corp. He is in the land and scouting department.

* * *

Donald C. Barton, geologist and geophysical consultant of Houston, was formerly head of Gulf Coastal research work conducted by Rycade Oil Corp., and the affiliated Geophysical Research Corp., both of which are headed by E. L. DeGolyer, chairman of the board of directors of the associated Amerada Corp. Mr. Barton resigned about two years ago to engage in business for himself.

Dr. Barton is a native of Stow, Mass., and a graduate of Harvard University. He obtained his A. B. and A. M. degrees, with final honors, in 1910 and his Ph. D., in 1914. After teaching two terms at Washington University, St. Louis, 1914-1916, he joined the southwestern organization of the Empire Gas & Fuel Co., where he remained one year.

He was attached to the meteorological section of the signal corps, American Expeditionary Forces, in the World War. He joined the Rycade organization after the war, remaining in it and affiliated companies until setting up for himself.

Dr. Barton holds membership in the Society of Economic Geologists, the Geological Society of America, American Association of Petroleum Geologists, American Institute of Mining & Metallurgical Engineers, American Association for Advancement of Science, American Meteorological Society, Boston Society of Natural History and others.

Donald C. Barton

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Many orifice meter users are still using the First Edition of Pressure Extensions published in 1920. To facilitate more rapid work, two new and improved Metric publications of Pressure Extensions are now available. One of these books parallels the information given in the obsolete edition; the other condenses it.

In both new books, the physical characteristics of the pages have been changed to attain maximum readability with a minimum of effort. To secure this improvement, a soft yellow paper is used; pages are two inches longer; column and figure arrangement is better; type is bold and legible, with proper differentiation between the index and extension columns. The greater page depth permits a repetition of column headings midway down the page, and a greater horizontal spacing between every five lines.

Since the one new book covers much more data than is ordinarily required for general use, the first 21 pages are bound in lighter and cheaper form. The range covered in this abbreviated book goes to 49 pounds. Where this range is sufficiently high, the abbreviated edition is recommended because of the easier handling of fewer pages and the saving in cost. The paper used is a tough, heavy stock, selected for its wearing qualities. Explanation of the use of the tables appears in both books.

We are glad to submit both books on approval for comparison and without obligation to buy them. One or the other will certainly be found a great improvement over the 1920 edition of Pressure Extensions. The price of the complete book (87 pages, cloth binding) is $12.50; of the abbreviated book (21 pages stiff paper binding) $2.50, parcel post prepaid.

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Nearly 100 Wells Drilling to Third Clarke Zone in Santa Fe Springs

By Jack N. Westsmith
N. P. N. STAFF WRITER

LOS ANGELES, Aug. 10

THE extensive deep drilling campaign in the Santa Fe Springs field has been steadily increasing for the past few weeks and it is now estimated that nearly 100 projects have the 3rd Clarke zone as their objective.

Shell Oil Co. is leading in the search for production from below the 7900 foot level with the announcement of 12 new locations. Shell also has two rigs going up and two wells with the foundation laid, all of these 16 wells have been scheduled for the 3rd Clarke. As offsets to these wells of the Shell Co., The Texas Co. has made several locations on its Baldwin and Standlee leases.

Other companies have announced their intentions of following the lead of Shell Oil Co. and it is expected that exploitation of the deepest Clarke sand will be very thorough. This sand is known to have limits far beyond those of the O'Connell zone and to have a strong kick.

Because of the requirements of the State Mining Bureau that protective water strings be set over Meyer, Buckbee, O'Connell and either the 2nd or 3rd Clarke zones, wells in the center of the field will not attempt to produce from the 3rd Clarke zone at present. An attempt is being made by operators in the Santa Fe Springs field to secure the sanction of the state officials to the elimination of the Buckbee water shut-off within the productive limits of the O'Connell sand and where the Buckbee sand is wet.

If the cement job over the Buckbee zone could be done away with operators in the center of the field could still reach the 8000 or 8500 foot level in wells that were started with production from shallower sands in view. Many wells have been deepened after producing from Meyer, Buckbee, or Nordstrom zones only to find upon arrival at a depth of 7500 to 8000 feet that the hole had run out on them.

Production in the Santa Fe Springs area took a substantial upward turn during the past week through the completion of eight wells and the recompletion of four others. Eight of the new wells are producing from the O'Connell zone an average of 3725 barrels per well.

This sand will continue to be a big factor in production figures of the field for some time although natural decline of the recent large completions from the O'Connell has been very rapid. Preparations are being made to complete a large part of the 25 wells drilling below their water shut off points in this zone.

Three of the new completions during the week were in the 3rd Clarke sand for an average of 2932 barrels. Cement jobs have been made on 10 wells in this zone and 17 wells are drilling of which 3 are expected to be placed on production within the next week. Approximately 40 wells are drilling below the 7000 foot level.

An interesting test is expected within the next week at General Petroleum Corp.'s Jalk 113 which has the bottom of the hole at 8363 feet in good looking oil sand. If a commercial producer is made of this well previous California depth records will have been passed but at the rate hole making is now being developed the new record is not expected to stand much longer than some airplane endurance records.

CALIFORNIA operators again cast speculative eyes toward the coastal strip between Ventura Avenue and the Hollister prospect of Western Gulf Oil Co. with the blowout of General Petroleum Corp.'s More well No. 1 three miles southeast of Elwood terrace, near the town of Goleta. While going in to clean out the hole which was bottomed at 4533 feet they came in for an estimated output of 60 million cubic feet of natural gas that has a gasoline content of .35 of a gallon per 1000 cubic feet.

The terrific force of the escaping gas cut a corner off the blowout preventer and so all attempts to kill the well have proven unsuccessful. To add to the difficulties the drill pipe is clogged up to such an extent that it is impossible to pump in heavy mud.

Presence of such gas sands as this and the one discovered by Continental Oil Co. in its Franklin well of the Carpenteria area have caused many experts to predict that other worthwhile oil fields in addition to the ones at Ventura Avenue and Elwood, will be found in the Ventura Basin. The highly faulted condition of the structure in this vicinity combined with folded, overturned and squeezed anticlines precludes actual prediction possible in more regular formations.

Announcement has also been made of two deep tests scheduled for the Santa Barbara Mesa field, in which it is estimated several million dollars were lost in a recent promiscuous drilling campaign that was promoted by apparently nothing more than a wet 1000 barrel discovery well.

The Roggi-Coffman interests will push their No. 1 well from its present depth of 2400 feet to possibly 5000 feet in search of a deep sand that would correspond to the producing sand at Elwood. Craft Petroleum Corp. also has announced its intention of drilling to at least the 3500 foot level in the Foster No. 2, approximately 600 feet from the discovery well in that area. This well drilled to completion by Olympic Oil and Refining Co. was killed for lack of storage and in an attempt by General Petroleum Corp. to place it back on production failed to make more than a few barrels of salt water per day.

Olympic Oil and Refining retained five acres when it leased its other holdings to General Petroleum on a 50-50 basis, and is drilling below 2300 feet in its Knott No. 1 located on this small tract. Although nothing in the way of oil sand has been penetrated the well will be drilled deeper to test the formation.

An attempt will be made to make a shallow producer of Southern Exploration Co.'s Twitchell No. 1 in the Summerland field. This well has been plugged back to 292 feet from 1221 feet, where it encountered red shale devoid of oil. A fairly saturated oil sand was reported found between 292 and 550 feet.

DRILLING is continuing at Kettleman Hills although it is expected that the agreement to shut this field in for a period of two years will be fully signed in the near future. Milham Exploration Co. has a number of wells at critical depths any one of which may be expected to be placed on production within a few weeks. Its Elliott No. 2 is at 6795 feet in hard sand, the Beal well No. 1 is at 5747 and is reaming. The most important well at this time is the Milham Kennedy No. 1 bottomed at 7190 feet. Rich oil sand was cored from 7186 to the present bottom and every indication points to its successful completion. The well is considered to be

approximately 400 feet down structure from the Milham discovery.

Shell Oil Co.'s Armstrong No. 1 which was killed to deepen after yielding approximately 200 barrels of oil per day for several days, is drilling ahead below 6790 feet. This well will be allowed to complete under the Kettleman Hills agreement.

Leasing in the San Joaquin valley area is destined to be increasingly active as a result of the shut-in agreement arrived at in Kettleman Hills. Success of operators in the latter area and the recent developments in the Maricopa Flats to the South has injected new life into the valley fields. Communities that have tasted of the prosperity that follows an oil discovery are doing every thing they can to encourage further development.

Well West of Maljamar Area Significant Completion

By Paul Wagner
N. P. N. STAFF WRITER

HOUSTON, Aug. 9

A WELL that made 100 barrels in its first hour has been brought in by the Pueblo Oil Co., subsidiary of the American Republics Corp. (J. S. Cullinan interests), in 18-17S-31E, Eddy county, New Mexico. It is the No. 1 Russell permit, west of the Maljamar area of northwestern Lea county.

The fact that the well made its maximum showing after swabbing test discounts its ability to produce at a daily rate comparable with results shown by its first hourly gauge. It is believed, however, to represent an important completion in an area a quarter of a mile northeast of the No. 1 Jackson well of Flynn, Welsh & Yates, which came in for 270 barrels daily, last March, at 3560 feet.

Pueblo Oil Co.'s current well topped pay at 3474 feet and was drilled in four feet. Flynn, Welsh & Yates are drilling a diagonal offset and Prairie Oil & Gas Co. is putting down a north offset to the Pueblo well.

North of production in township 25S, range 36E, Lea county, the Wells test of Continental (Marland) Oil Co., and the California Co., made 60 barrels of oil and four bailers of sulfur water, Aug. 8. It is now drilling below 3475 feet.

Northwest of the Midwest Refining Co.'s producing well in the Hobbs area, the Humble Oil & Refining Co.'s No. 1 Bowers, 30-18S-38E, had a blowout of 10,000,000 cubic feet of gas at 2772 feet. It is now drilling ahead in lime and anhydrite. Surface elevation is 3657 feet as compared with 3600 feet in the Midwest well. First gas was found in the Midwest well at 2835-2865 feet. It got oil production in a horizon below 4200 feet.

In the area of Lea county development northwest of The Texas Co.'s Rhodes well, the Midwest had 7,000,000 cubic feet of gas daily at 3265 feet in its No. 1 Gregory, 31-25S-37E. It was last reported drilling in lime at 3290 feet.

Surface elevation of the Gregory test is 2988 feet, or 18 feet higher than The Texas Co.'s Sheppard, southeast of it across the township line, which recently made 1560 barrels daily before going "dead."

TULSA, Aug. 10.—D. R. Snow has been appointed manager of the geological, land and lease department and George A. Schwab has been named superintendent of the land and lease departments of the Barnsdall Oil Corp. Both Mr. Snow and Mr. Schwab entered the services of the company Jan. 1, 1926 when the Waite Phillips Co. was taken over by the Barnsdall corporation.

Magnolia Pipe Line Runs in July

HOUSTON, August 9.—Magnolia Petroleum Company, pipeline department, announces from Dallas headquarters the following crude oil runs for July, which are shown in comparison with June.

	June	July
Hewitt-Graham	147,353.28	153,295.93
Healdton	209,104.79	216,731.20
Cushing	104,839.33	107,496.26
Yale	40,353.66	42,216.06
Augusta	35,422.40	37,413.27
Wewoka	861,240.18	1,045,160.15
Seminole	59,181.40	55,293.98
Total Okla.-Kans.	1,457,495.04	1,657,606.85
Archer	20,210.30	21,225.50
Burkburnett	61,463.61	62,761.39
Comanche	16,767.12	16,845.60
Electra	80,863.26	87,186.46
Corsicana—Heavy	8,551.21	9,183.87
Corsicana—Light	11,133.18	12,082.79
Henrietta	2,097.60	2,356.86
Iatan	17,319.67	18,206.16
Luling	291,825.83	302,230.02
Lytton Springs	32,011.18	34,536.99
Mexia-Wortham	20,533.10	22,370.14
Mirando	166,978.00	175,249.46
Olden	8,787.01	8,852.97
Panhandle	200,766.78	75,954.13
Panola	269.06	2,138.77
Stephens	8,354.52	8,807.35
Thrall	1,083.47	1,233.79
Crane-Upton	113,916.27	53,986.27
Glasscock	66,034.30	59,633.01
Winkler	82,351.97	78,074.58
Total Texas	1,211,318.10	1,052,916.11
Haynesville	4,216.41	4,408.44
Bull Bayou	36,514.27	36,956.48
Cotton Valley	23,604.83	24,318.62
Pine Island	27,213.96	28,850.50
Hackberry	22,850.64	25,221.83
Total Louisiana	114,400.11	119,755.87
El Dorado Light	45,235.37	44,955.87
East El Dorado	3,714.21	3,328.77
Smackover	5,979.28	5,942.53
Rainbow	68,891.55	71,453.52
Total Arkansas	123,820.41	125,680.69
GRAND TOTAL	2,907,033.66	2,955,959.52

OKLAHOMA-KANSAS

Report for July		Dly. Avg.
Runs	2,261,251.00	72,944.00
Shipments	2,338,228.00	75,427.00
Total Stock	9,894,115.00	

TEXAS

Wichita, Wilbarger, Archer		
Runs	171,694.00	5,539.00
Shipments	177,533.00	5,727.00
Petrolia		
Runs	2,357.00	76.00
Shipments	2,357.00	76.00
Eastland, Stephens		
Runs	34,496.00	1,113.00
Shipments		

TOTAL STOCK 373,470.00—North Cetral Texas Field.

Completions in California, Week Ended August 3, 1929

Long Beach

Company	Well No.	Location	Depth	Init. Prod
Archer Oil Co.	Reagan No. 1	....	6745	700
Bush-Voorhies	Brennecker No. 1	....	6467	1000
Continental Oil Co.	Modoc No. 1	....	7595	678
Pet. Securities	Nelson No. 1	....	7400	1660
Strader Oil Co.	Vista Del Mar No. 1	....	4769	745
The State Co.	Sievers No. 1	....	6830	2150
Warren & McCrate	McKay No. 9	....	7423	1500

Santa Fe Springs

Associated Oil Co.	Dallugge No. 7	....	8100	1525
Bardeen, H. A.	S. F. No. 2	....	6848	1000
Shell Oil Co.	G. H. N. No. 13	....	6845	1240
Standard Oil Co.	Weisel No. 13	....	8033	3650
Union Oil Co.	Alexander No. 16	....	6892	2850
Univ. Oil Co.	O'Connell No. 2	....	6450	1200

Richfield

Company	Well No.	Location	Depth	Init. Prod
Cont. Oil Co.	Mondodi No. 1	....	4425	300
Cont. Oil Co.	Pyne & 7A	....	4450	425

Ventura Avenue

Gen. Pet. Corp.	Notton No. 12	....	7234	161
Shell Oil Co.	Taylor No. 38	....	6950	2600
Shell Oil Co.	Taylor No. 41	....	7062	4650

Kettleman Hills

Standard Oil Co.	No. 81	....	6673	850

Belridge

Ohio Oil Co.	No. 28	....	769	20

Completions in Oklahoma and Kansas, Week Ended August 10, 1929

OKLAHOMA

Carter County

Company	Well No.	Location	Depth	Init. Prod.
Sturm	3	NW SE SW 35-3S-2W	894-920	5
Atlantic	3	NW SW NW 12-1S-4W	3058-3570	140
Magnolia	1	SE SW SE 2-1S-4W	3575-3680	110

Creek County

Company	Well No.	Location	Depth	Init. Prod.
Sooner	3	C SE SW 12-17-11E	1163-1178	15
Murphy et al	2	CSL NE SW 12-17-11E	1233-1242	10
Thompson-Black	4	NWc SW 16-17-11E	753	Dry
White	1a	NE SW NW 14-18-11E	2845	Dry
Prairie	2	NW NE SE 18-16-9E	3042	

Hughes County

Company	Well No.	Location	Depth	Init. Prod.
Texas	1	SE NE SW 9-6-8E	2650-2666	100

Kay County

Company	Well No.	Location	Depth	Init. Prod.
Marland	4	NEc NW 17-29-1E	3565	Dry

Kiowa County

Company	Well No.	Location	Depth	Init. Prod.
Rymer et al	1	SE SW SW 7-6N-16W	530	Dry

Marshall County

Company	Well No.	Location	Depth	Init. Prod.
Bilbo	1	SWc SE NW NW 30-5A-6E	560-567	10

Muskogee County

Company	Well No.	Location	Depth	Init. Prod.
Robinson Bros	3	NWc SW NE 8-13-16E	1644-1658	20
Mazda	2	CEL SE NW 8-13-16E	1642-1654	20
Bryan	8	CEL SE NE 8-15-15E	1652-1667	50
Bradley	1	NWc SW 26-15-19E	1212	Dry
Swindler	1a	NW SW NW 29-15-16E	1223	Dry
Burke	1a	CWL SW SW 7-15-18E	1035	Dry

Okfuskee County

Company	Well No.	Location	Depth	Init. Prod.
Prairie-Slick	1	SEc NE 25-10-11E	3165	Dry
P & R et al	5	SEc 29-12-10E	2903-2921	150

Okmulgee County

Company	Well No.	Location	Depth	Init. Prod.
Wallace	9	CWL SW NE 14-14-14E	1032-1072	15
Misener	2	CEL SE NW 14-14-14E	1743-1753	12
Riverland	1a	CWL SE 17-13-15E	2847	Dry

Oklahoma County

Company	Well No.	Location	Depth	Init. Prod.
Prairie-Slick	1	SWc SE 19-11-2W	6422-6433	3500 35M

Osage County

Company	Well No.	Location	Depth	Init. Prod.
Gray	9	CEL W2 NE 28-20-11E	2105-2135	35
Devonian	3	CNL NW SW 30-21-10E	2018-2134	15
Elliott-Smith	1	NWc NE 31-22-12E	1333-1339	10
Oliphant	3	NW NE NW 6-23-9E	2123-2154	50
Maxwell	3	NWc NE SE SW 5-24-11E	1685-1712	5
Peters	8	NWc NE SE NW 32-24-9E	616-626	3
Peters	10	SW NE NW 26-25-9E	2083-2134	200
Texas	7	NE SW SE 30-25-8E	2447-2467	60
I. T. I. O.	1	SWc NW 16-27-10E	1877-1880	80
I. T. I. O.	411	SE NW NW 1-28-10E	460-495	1M
Winona	12	SEc SW SW 22-29-11E	936-1005	15

Pawnee County

Company	Well No.	Location	Depth	Init. Prod.
Prairie	10	SW NE NW 10-20-8E	2465-2480	10
Adamson	3	SW SE SE 24-21-7E	2673-2742	200

Payne County

Company	Well No.	Location	Depth	Init. Prod.
Reiter-Foster et al.	1	C SW SE 5-19-1W	4838-4844	100

Pottawatomie County

Company	Well No.	Location	Depth	Init. Prod.
Empire	2	SEc NE 8-8-5E	4042-4060	1360
Magnolia	1	SEc NE 18-7-4E	3780-3926	135
Mid-Continent	1	SEc 8-7-4E	4036-4058	175
Darby	1	SWc 9-7-4E	3948-4090	125
Magnolia	1	NW SW SW 15-7-4E	3655-3900	90
Magnolia	1	NE NW NE 22-7-4E	3660	5M
Indep.-Westland	2	SW NW NW 16-7-4E	4020-4061	1385
Gypsy	2	SW NW SE 17-7-4E	4150-4178	660
Martin-Erwin	1	SE NE NE 2-7-4E	4118-4145	700
Gypsy	1	NWc SW 1-7-4E	4350	Dry
Stoner et al	1	NEc SE SW 18-6-4E	4012	Dry

Seminole County

Company	Well No.	Location	Depth	Init. Prod.
Carter	3	NE SW NW 26-7-6E	3155-3169	185
Carter	2	SW NE NW 24-7-6E	4147-4155	965
Barnsdall	3	SW NW NE 23-7-6E	3140-3179	600
Texas	7	SE NE SW 11-7-6E	3157-3159	50M
Empire	14	NEc SE 11-8-5E	4195-4204	494
Carter	2	SW SE SW 2-8-5E	4224-4232	1765
Magnolia	2	NWc SE 18-9-6E	4253-4262	4800
Carter et al	1	NWc SE 16-9-6E	3430-3532	275
Skelly-Prairie-Slick	1	NWc 5-9-6E	4312-4337	510
Prairie	2	CNL NE SW 6-8-6E	4509-4515	1010
Gypsy	1	SWc 27-7-6E	4388	Dry
Superior-Gypsy	1	SEc NE 11-9-6E	4429	Dry
I. T. I. O.	1	SEc 24-6-7E	4300	Dry
Prairie	10	NE SW NW 11-8-5E	4289	Dry
Elk	4	SEc NW SE 29-18-17E	450	Dry

Stephens County

Company	Well No.	Location	Depth	Init. Prod.
Franklin	5	SW NW SE 12-1S-4W	2870	60

Wagoner County

Company	Well No.	Location	Depth	Init. Prod.
Elk	4	SEc NW SE 29-18-17E	450	Dry
Creekmore et al	11	CSL NW SW 21-18-16E	780	Dry

KANSAS

Barber County

Company	Well No.	Location	Depth	Init. Prod.
Barbara	1	C NW NE 14-33-13W	4554-4630	15M

Butler County

Company	Well No.	Location	Depth	Init. Prod.
Empire	1	SW SE SE 15-27-5E	2758-2772	40
Empire	10	SW SE SE 22-27-5E	2731-2766	275

Chautauqua County

Company	Well No.	Location	Depth	Init. Prod.
Miller	2	SEc 33-32-10E	1481-1500	30

Ellis County

Company	Well No.	Location	Depth	Init. Prod.
Phillips	1	SWc NE 9-13-19W	3593-3595	300

Greenwood County

Company	Well No.	Location	Depth	Init. Prod.
Murphy et al	7	NE NW NE 6-25-9E	2131-2151	90
Texas	7	SE SW SE 21-23-11E	1871-1971	500
Phillips	1	NE NW NE 28-23-11E	1874-1965	650
Shafer-Howell	15	CNL NE NW 15-23-13E	1785-1811	10
West Coast	1	NW SW SE 5-26-13E	1729	Dry
Phillips	4	NEc NW 10-22-10E	2300	Dry

Kingman County

Company	Well No.	Location	Depth	Init. Prod.
Fleeger-Houston	1	NE SE SW 16-27-7W	1337	Dry

Marion County

Company	Well No.	Location	Depth	Init. Prod.
General Utilities	1	C NW 17-19-3E	Aband. location	
Darby	4	SW NE SE 12-19-2E	2831-2852	85

Sedgwick County

Company	Well No.	Location	Depth	Init. Prod.
Texas	1	NW SW SW 21-28-1E	3090-3102	470
Bu Vi Bar et al	6	NEc 12-26-1W	3358-3365	540
Wentz	1	SE NE NW 1-26-1W	3337-3342	277
Davis-Skelly	11	SW NW NE 1-26-1W	3352-3357	200
Davis-Skelly	10	NW SW NE 1-26-1W	3370-3379	800
Bu Vi Bar et al	7	NEc SW 1-26-1W	3345-3367	115
Slick et al	1	SWc SE SW NE 11-26-2E	3180	Dry

Woodson County

Company	Well No.	Location	Depth	Init. Prod.
Peterson	2	NE SE SW 31-23-16E	1535	Dry

New Field Operations in Oklahoma, Kansas, North, North Central, East Central, Panhandle and West Texas, Week Ended Aug. 10, 1929

OKLAHOMA

Carter County

Company	Well No. & Farm	Location	
Boring et al	6-Walker	SEc SW SE NW 10-4S-2W	
Simpson-Fell	6-Walker	SEc SW NW 10-4S-2W	
Porter et al	1-Roberson	SEc NW 23-3S-4W	
Prairie-Franklin	14-Pruitt	SW NW NW 3-2S-3W	
Magnolia	2-Tivas	SWc NW 20-1S-3W	
Merrick et al	3-Denny	NWc SW 20-1S-3W	

Cotton County

Company	Well No. & Farm	Location	
Oakes et al	1-Mullins	SEc NW 28-2S-10W	
Shasta	1-Slogan	NWc SW NW NE 2-2S-10W	
Parkins-Cullum	4-Smith	SEc 34-1S-10W	

Creek County

Company	Well No. & Farm	Location	
Prairie	1-Elmore	SW NW NW 10-19-7E	
Carter	10-Durant	NEc 18-16-9E	
Texas Pacific	9-Beaver	NW SW NW 17-16-9E	
American	1-Tiger	SEc NE 26-17-10E	
Pioneer	1-Jones	SE SW NE 18-17-10E	
Merritt et al	1-Brown	NE SW NE 27-18-8E	
Bartlett	1-Jackson	SE SW SW 23-18-8E	
Gleo	2-Gates	SW NW SE 31-19-9E	
Phillips	2-Houston	NW NE NE 20-19-9E	
Texas	1-Jackson "B"	SE SW NW 25-19-8E	
Foster	2-Hinton	SW SE NW 25-19-8E	

Grady County

Company	Well No. & Farm	Location	
Oklahoma Nat	12-McCaughtry	SW NE NE 23-5N-8W	

Hughes County

Company	Well No. & Farm	Location	
Magnolia	1-Dimment	NEc SW SW 8-6-8E	

Kay County

Company	Well No. & Farm	Location	
Wentz	2-Harris	SEc NW 31-27-2E	OWD
Marylene	3-School	NWc SE NW 16-27-1W	OWD
Wentz	17-Mooney	SEc NW 17-28-1E	OWD
Decamp-Lancer	1-Cover	SEc NE 24-28-1W	

Kiowa County

Company	Well No. & Farm	Location	
Engle et al	1-Kelsey	NWc SW 20-7N-17W	

Lincoln County

Company	Well No. & Farm	Location	
Willis et al	1-Shannon-Sasser	C NE SW 20-17-3E	

Marshall County

Company	Well No. & Farm	Location	
Bilbo	2-Davis	NWc SE NW NW 30-5S-6E	

Muskogee County

Company	Well No. & Farm	Location	
Mussellem	5-Brock	SEc SW NE 4-13-19E	

Okfuskee County

Company	Well No. & Farm	Location	
Havel et al	1-Grayson	SWc SE 23-11-11E	
Champlin	14-Holmes	NEc 22-11-11E	
Champlin	13-Jacobs	SEc 15-11-11E	
Superior	1-Robinson	NEc SE 10-12-11E	
Henry	1-Allen	NWc 35-12-9E	

Okmulgee County

Company	Well No. & Farm	Location	
Prairie	2-Palmer	C NW SW 29-13-12E	

Oklahoma County

Company	Well No. & Farm	Location	
I. T. I. O. et al	1-Anderson	SEc NE 25-11-3W	
I. T. I. O. et al	2-Emerson	NWc SW 30-11-2W	
I. T. I. O.	1-Canfield	SEc SW 19-11-2W	
Ryan Cons.	1	NEc NW 3-11-2W	
I. T. I. O. et al	1-Canfield-Button	SE NE SW 19-11-2W	
Prairie-Slick	4-Hiddleston	SW NW SE 19-11-2W	
I. T. I. O.	1-Farley-Fuzzell	SEc NW 19-11-2W	
Coline	2-Warren	NWc SW 18-11-2W	
I. T. I. O. et al	2-Watters	NWc NE 25-11-3W	
I. T. I. O. et al	1-Kingman	SEc SW 24-11-3W	
Mid-Kansas et al	5-Fortson	SE SW NE 24-11-3W	
I. T. I. O.	2-Henning	SWc SE 24-11-3W	
Coline	5-Olds	NW NE NW 24-11-3W	
Mid-Kansas et al	1-Mollman	SEc 23-11-3W	

Osage County

Company	Well No. & Farm	Location	
Peters-P & R	3	SW SE SW 22-27-11E	

Pawnee County

Company	Well No. & Farm	Location	
Houston	1-Harbisch	NEc 25-20-6E	

Payne County

Company	Well No. & Farm	Location	
Mulberry	6-Sharrum	SW NW NW 5-17-4E	

Pottawatomie County

Company	Well No. & Farm	Location	
Slick	2-Alexander	SE NW SE 19-6-4E	
Gypsy	2-Gossland	SW NW SW 9-8-5E	
Slick	1-Ready	NEc 24-6-3E	
Shell	2-Jordan	NW SW NW 9-8-4E	
I. T. I. O.	4-Shelby	SWc SE 35-8-4E	
I. T. I. O.	3-Shelby	SE SW SE 35-8-4E	
Amerada	1-Smith	SE NE NE 8-8-5E	
I. T. I. O.	1-Weldfelt	NEc NW 2-7-4E	
Sinclair et al	2-Kelly "A"	NWc NE 2-7-4E	
McMann-White Eagle	1-Roberts	NW NE SW 9-8-5E	
Sinclair	1-Smith	SW NW NW 9-8-5E	
Commerce	1-Townlot	NW SE NW 8-9-5E	

Seminole County

Company	Well No. & Farm	Location	
Highway	1-Bryan	NE SE SW 9-6-8E	
Gypsy	1-Brummer	SW NW SE 9-6-8E	
Mid-Continent	9-Smith	NWc SE 5-7-7E	
Texas	1-Lewis	NW SE SE 13-5-7E	OWD
Independent	1-Thloco	NW NE SW 9-7-7E	
Texas	4-Mayhue	NEc NW 14-9-6E	
Superior	1	NE NW NW 9-7-7E	
Gypsy	1-Willie	SW NW NE 24-7-6E	
Empire	4-Coker	SW SE SW 13-7-6E	
Pure	13-Cotcha	NW SE NE 23-7-6E	
Carter	2-Robers	NW SW SE 2-8-5E	
Carter et al	1-Hully	NEc SW 15-10-6E	

(*Continued on Page 55*)

New Field Operations in Oklahoma, Kansas, North, North Central, East Central, Panhandle and West Texas, Week Ended Aug. 10, 1929

(Continued from Page 54)

Stephens County

Company	Well No. & Farm	Location
Magnolia	1-Martin	SWc 21-2S-4W
Pace et al	9-McMasters	SEc NE SE NE 13-2S-8W
Magnolia	8-Peck	NWc SW SE NE 13-2S-8W
Pearce-Brown	1-Harley	NWc 30-2S-6W
Winkler-McQueen	7-Springer	NWc NE SW NW 28-12-8W
Ven Mex Mid-Continent	7-Nigh	C NE NW 34-1S-8W
Magnolia	2-Kagay	NWc SW NW SW 34-1S-8W
American P. L.	8-Nigh	SWc SE NW 34-1S-8W
Denver-Wichita Falls	1-Allen	NEc SE 35-1N-9W

Tulsa County

Fortner	1a-Kell	NE SW SE 11-18-12E
Gledden	1-	NEc SE NE 3-19-10E

Wagoner County

Dixon	2-Brown	SWc NW 36-16-17E
Cherokee P. S.	2-Marshall	NEc SE 35-16-17E

KANSAS

Barber County

Barbara	3-Carter	NEc SW SE SE 2-33-13W

Butler County

Empire	85-Koogler	SW SE NW 20-26-5E
Empire	17-Huston	NW SE SW 19-26-5E
Empire	86-Koogler	SW NW NE 20-26-5E
Empire	87-Koogler	NE NW NW 20-26-5E
Empire	16-Gressman	NW SW NE 20-26-5E

Chase County

Sinclair	1-Owens	SEc 13-21-9E

Cowley County

McKnabb-Bess et al.	1-Aein	SW NE NW 19-32-5E
Roth-Faurot	1-Stone	SWc NE 34-32-4E

Elk County

Sherman et al	1-McSpadden	NWc 20-27-11E

Ellis County

Mid-Continent	1-Johnson	SW SE NE 9-13-19E

Greenwood County

Elk River	1-Peterson	NWc 20-27-11E
Mid-Continent	14-Sullivan	OWL NE NW 14-24-12E
Walton	1-Dalton	NE SE NW 5-24-13E
Empire	2-Norton "B"	SE SW SE 15-22-12E

Lyon County

Phillips et al	1-McClay	SE NE SW 27-21-10E

Marion County

Empire	1-Reizwig	NE NW NW 34-20-2E
Davis	1-Bartles	SEc NE 1-19-1E

McPherson County

Empire	1-Voshell	NE SE NE 9-21-3W

Pratt County

O'Haver-Jones et al.	1-Gereke	C NE SW 7-26-14W

Reno County

D. J. Wilson et al.	1-McPeters	C S/2 NW 22-26-8W
Witt et al	1-Olson	SEc NW 14-22-6W

Saline County

Dixie	1-Olson	NWc NE 10-16-3W

Sedgwick County

Wentz	4-Bright	SW SE NW 1-26-1W
Wentz	1-Miers	SEc SW 10-26-2E

Sumner County

Bu Vi Bar et al	1-Wilson	NEc NW 27-34-2W

Woodson County

Sullivan-Milrose	1-Pegram	SWc NW 33-23-14E

TEXAS
NORTH CENTRAL & EAST CENTRAL

Brown County

Company	Well No. & Farm	Location	Survey
Lloyd	22-Collier	Blk-139	Smith
Lloyd	19-Stanley	Blk-139	Smith
Lloyd	12C-Collier	Blk-139	Smith
Moore et al	1-Swindle	Sec-20	HT&B
Young Bros	10-Kilgore	Blk-152	McClure
Lloyd	4-Duff	Blk-624	Kenney
Green	4-Daris	.....	Townsend
Owen Inc. et al	1-George	.....	George
Ven Mix	7-D Hickman	Blk-801	McGlein
Texas	1-Keslor	Sec-42	HT&B

Callahan County

Woodley	5A-Finley	Sec-74	BOA
Campbell	1-Jackson	Sec-20	ETRR
Creath	1-Bootwrig	Sec-12	D&DA
Meade-Lieurance	1-Eastham	Sec-9	SPRR
Hunt-Dichlman	1-Cottle	Sec-3196	TEL

Coleman County

Owens Inc. et al	1-Brunke	Sec-100	ETRR
Midwest	4-Keeney	Blk-270	Eubanks
White Eagle	4-Morris	Sec-25 Blk-722	Webber
Tower-McKama	2-Crowder	Blk-483	Woocks
Herbert	1-Bennett	Sec-25 Blk-480	Johnson

Eastland County

Corzelieus-Toggart	1-Holland	Blk-1	S P R R
Texas-Quinlan	1-Hitson	Blk-2	S P R R
Crabb-McNeil	4-Turner	Sec-30 Blk-2	H&TC

Erath County

Lone Star	2-Cage	.....	Latham
Associated	1-Mulloy	.....	Bynum

Shackleford County

Moutray	1-Simpson	Sec-49 Blk-12	T & P
Tannehill	23-Newell	Sec-11 Blk-11	T & L
Roeser-Pendleton	45-A61 Cook	Sec-61	ETRR
Roeser-Pendleton	46-A61 Cook	Sec-61	ETRR
Grisham-Hunter	3-Davis	Sec-20 Blk-13	T & L

Taylor County

Dunigan-Shaw	1-Davidson	.....	Willis 122

NORTH TEXAS

Archer County

Gwynn	5-Thompson	Sec-20 Blk-16	ATNCL
Shappell	9-Lyles	Blk-7	Hooper-Wade
Perkins-Cullum et al.	1A-	.....	Bond
Bridwell	1-Andrews	.....	Bond
Burns	5M-Wilson	Sec-114	ATNCL
Humble et al	4A-Logan	Blk-25	Taylor
Petroleum Prod	9B-Kunkel	.....	BBB&C
Continental	9B-Richardson	Blk-10	McCoy
Ruff et al	1-Richardson	Blk-11	McCoy
Moran et al	3-Blookworth	.....	Cartwright
Williams et al	1-Kunkel	Blk-4	McCoy
United-Pet. Prod	1K-Wilson	Sec-31 Blk-8	ATNCL
Moral et al	1-Hilbers	Sec-95 Blk-4	Clark-Plumb
Young et al	3-Young	.....	DL&C
Burns-Texas	1-Garvey	Sec-1862	TE&L
Trinity	2-Benson	Sec-1829	TE&L
Burns	1-O-Wilson	Sec-114	ATNCL
Continental	3-A-Logan	.....	Armes

Baylor County

Hines	1-Morris	Sec-86	T&NO

Cooke County

Beckner et al	2-Grotter	.....	ETRR
Lanier et al	1-Hunt	.....	Dooley
Humble	5-Poteet	.....	Stephens
McElreath-Suggett	1-Harris	.....	SPRR
Fain-McGaha	2-Huggins	.....	SPRR
Coline	1-Huggins	.....	SPRR
Texas	2-Embry	.....	Rogers
Shell	1-Bowers	.....	Stanley
Shell	2-Field-Bowers	.....	Stanley
Danciger	3-Huggins	.....	SPRR
Kewanee	7B-Hyman	.....	ETRR

Wichita County

Everett-Jamison	1-Gibson	Blk-302	Waggoner
Continental	15E-Burnett	Sec-2	T&NO
Golding-Cochran	8M-Waggoner	Blk-22	George
River-Bailey	10A-Mitchie	.....	Netherly
King	1-Key Boyd	Blk-12	Lewis
M. G. C.	1-Crudup Leag 4	Blk-10	DCSL

Wilbarger County

Rathke	1-Watts	Sec-64 Blk-15	H&TC
Shell	4A-Waggoner	Sec-43 Blk-4	H&TC
Hoover-Scientific	B1-Waggoner	Sec-10 Blk-2	H&TC
Phillips	6-Waggoner	Sec-18 Blk-4	H&TC
Grayback	1-Waggoner	Sec-40	MEP&P
Consolidated	0-9-Waggoner	Sec-40	MEP&P
Grayback	11-Waggoner	Sec-40	MEP&P
Staley-Wynne	5-B-Waggoner	Sec-25 Blk-4	H&TC
Staley-Wynne	E2-Waggoner	Sec-25 Blk-4	H&TC
Lawson	6A-Waggoner	Sec-25 Blk-4	H&TC
Lewis	10A-Waggoner	Sec-18 Blk-4	H&TC
Waggoner	5-9-Waggoner	Sec-25 Blk-4	H&TC

Young County

Rannell	8B-Jack	Blk-23	YCSL
Bradstreet et al	2A-Richardson	.....	Mauphin
Walton et al	1-Jones	.....	Tynes
Williams	1-Harmon	.....	Sallie
Carpenter	4-Barrett	.....	Sergeant
Parks et al	4-Carpenter	.....	Sergeant
United Royalty et al.	2-Carpenter	.....	Sergeant
Stafford	2-Farrow	Sec-283	TE&L
Cooper-Hill	1-Hankins	Sec-410	TE&L

PANHANDLE TEXAS

Carson County

Skelly	18-Schaeffer	Sec-68 Blk-4	I&GN
Reynolds et al	2-Cooper	Sec-5 Blk-9	I&GN
Empire	2-Lane	Sec-62 Blk-4	I&GN
Empire	1-Deahl	Sec-3 Blk-5	B & B
Empire	1-Fuqua	Sec-17 Blk-3	AB&M
Champlin	4-McConnell	Sec-67 Blk-4	I&GN
Skelly	21-Schaeffer	Sec-68 Blk-4	I&GN
Ryan	5-Block	Sec-111 Blk-4	I&GN
Delmar	5-Noel	Sec-198 Blk-3	I&GN
Skelly	19-Schaeffer	Sec-198 Blk-3	I&GN
Gulf	3-Cooper	Sec-5 Blk-9	I&GN

Gray County

McMan	3-Saunders	Sec-1	Eustice
McMan	5-Palmer	Sec-31 Blk-B2	H&GN
Texas	5-Combs-Worley	Sec-36 Blk-3	I&GN
Danciger	4-Back	Sec-28 Blk-B2	H&GN
Danciger	5-Beck	Sec-28 Blk-B2	H&GN
Panhandle	3-Saunders	Sec-3 Blk-1	ACH&B
Guernsey	1-Pope	Sec-173 Blk-3	I&GN
Operators	1-Lovett	Sec-57 Blk-B2	M&GN

Hutchinson County

Devore et al	1-Johnson	Sec-28 Blk-Y	A & B
Sunny Jim	3-Pitts	Sec-9 Blk-M21	TCRR
Penowa	3-Smith	Sec-7 Blk-Y	M&C

Wheeler County

Magnolia	1-Laycock	Sec-9 Blk-27	H&GN
Vaughan et al	4-Ackley	Sec-4 Blk-27	H&GN
Uphan	1-Ladd	Sec-97 Blk-23	H&GN

WEST TEXAS

Crane County

Guff	8-Waddell	Blk-24	PBSL

Garza County

Thompson	1-Tupping	Sec-10 Blk-6	H&GN

Glasscock County

Landreth-Tidal	1-Houston	Sec-29 Blk-35	T & P

Howard County

Amerada	12-Roberts	Sec-128 Blk-29	W&NW
Continental	7A-Settles	Sec-136 Blk-29	W&NW
Continental	8A-Settles	Sec-135 Blk-29	W&NW
Continental	6E-Chalk	Sec-124 Blk-29	W&NW
Moody	17B-Roberts	Sec-137 Blk-29	W&NW
Moody	21B-Roberts	Sec-137 Blk-29	W&NW
Continental	1-Klock-Rumsey	Sec-13 Blk-33	T&P
Continental	3-Kloch-Rumsey	Sec-13 Blk-33	T&P
Shell	1-Kloch-Rumsey	Sec-13 Blk-33	T&P

Pecos County

McMann	4-Richardson-Goodrich	Sec-108	TCRR

Completions in Texas, Week Ended August 10, 1929

NORTH CENTRAL & EAST CENTRAL

Brown County

Company	Well Farm	Survey Sec. & Blk.	Depth	Init. Prod.
Buder	5	Kenney Blk-624	1128-1142	150
Lloyd	12-G2	Smith Blk-139	460-463	1
Lloyd	3	Kenney Blk-624	1155-1156	120
Lloyd	18	Smith Blk-139	427-436	4
Smith	1	Chaddick Sec-42	1289-1305	373
Beasley	1	Kerr Co. Sec-69 Blk-272	520	Dry
Humble	23	Jaun Delgado Blk-789	1258	Dry
Traxel et al	1	Carrier Blk-60	853	Dry

Callahan County

Condor	1	Denton Sec-343	1607	Dry
Dickey	2-A	D&DA Sec-18	452	Dry
Dickey	4	D&DA Sec-25	742	Dry
Cook et al	1	Smith	812	Dry
Humphries Bros.	9	D&DA Sec-40	420-422	7

Coleman County

Chapman et al	3	Martinez	1562½	Dry
Owens et al	1	Doran Sec-46 Blk-666	1957	Dry

Eastland County

Conway-Champion	5	McLennon Co. Blk-27	1157	Dry
Belva	8	BBB&C Sec-56	3500-3525	125
Lewis-Moore	4	H&TC Sec-27 Blk-2	1287-1292	123

Erath County

House et al	1	Goff Blk-290	3325	Dry
Owens	1	SPRR Blk-52	3673	Dry

Jack County

Texas	1	Hugheson	3065-3069	195

Jones County

Kuekley et al	1	Penny Sec-271	2902	Dry
White Eagle	1	Williams Sec-30	2785	Dry

Shackelford County

Cranfill-Reynolds	2G	T & P Sec-35 Blk-11	1120	Dry
Simms	1	T & P Sec-63 Blk-11	1160	Dry
Shulman et al	1	TE&L Sec-1548	612	Dry
Rosser-Pendleton	1rA62	ETRR Sec-62	1418	Dry
Powell	1	Brister Sec-65	661	Dry
Gilman-McMurray	3	ETRR Sec-2	666	Dry
Vacuum	4C	ETRR Sec-29	1168-1169	100
Tannehill	22	T&P Sec-11 Blk-11	937-940	67
Roeser-Pendleton	9A88	ETRR Sec-88	1371	.25M
Roeser-Pendleton	44A61	ETRR Sec-61	1342-1354	40

Stephens County

Lone Star	2	T & P Sec-54 Blk-7	2137-2145	16.5M
Texas Cons	1	LAL Sec-25	3145-3200	20

Throckmorton County

Combest	1	SPRR Sec-2	827	Dry
Woodson	3	TE&L Sec-960	1288-1296	18

NORTH TEXAS

Archer County

Brown-United	5	ATNCL Sec-17 Blk-11	1486-1488	60
Burns	4M	ATNCL Sec-114	1427-1434	70
Freeman	7	Meade Blk-21	1444-1446	30
Gwynn-Archer	3	ATNCL Sec-20 Blk-15	1585-1596	40
Humble	5	BBB&C	1129-1181	250
Josey et al	5	Dorsey Blk-24	657-667	15
Petroleum Prod	6B	BBB&C	1162-1183	200
Petroleum Prod	7B	BBB&C	1163-1183	35
Smith, Jr	5	TE&L Sec-1860	745-753	14
United Prod	1	H&TC Sec-1 Blk-7	1613-1614	20
Continental	3C	FCSL Blk-16	1303	Dry
Continental	8B	McCoy Blk-10	1205	Dry
Johnston	1H	TE&L Sec-1865	813	Dry
Kemrow	6	DCSL Blk-1	788	Dry
Magnolia	1	TE&L Sec-2411	1501	Dry
Pace	2	SPRR	2002½	Dry
Texas	1	Harris sub Blk-32	1554	Dry
Williams	1	BBB&C	1152	Dry
Petroleum-Hines	1	Scott Blk-11	1274	Dry
Young et al	2	DL&C	1305	Dry

Baylor County

Grisham et al	1	TE&L Sec-1281	1414	Dry

Cooke County

Daniels et al	1	Harris	Abandoned location	
Rowe-Hinkle	1	Mebane	Abandoned location	
Danciger	1	SPRR	1148-1155	340

Grayson County

F. H. E	1	Loveall	859	Dry

Palo Pinto County

Lindsay	1	Castleman Sec-29 Blk-178	1772-1858	46

Wichita County

Continental	14E	T&NO Sec-2	1638-1640	15
Golding-Cochran	7M	George Blk-22	1272-1282	12
Stumpf, Melat-Graham	1	DCSL Blk-10	1805-1813	187
Texas	8A	George Sec-7 Blk-28	1273-1295½	360
Unit. Prod. et al	1A	KWVFL Blk-31	1754½-1755½	12
United Prod. et al	1B	KWVFL Blk-30	1748-1753	20
Riner-Bailey	6B	Netherly	1265	Dry
Bradstreet	1	Balch	1899	Dry
Continental	1A	Hornsby	1484	Dry
Grayback	1	Lewis Blk-10	1809	Dry
Ryan	109	Fowler	1822	Dry
United Prod	3	KWVFL Blk-29	1756	Dry
Whitaker-Hamilton	1	Knotts Sub Blk-17	1730	Dry

Wilbarger County

Knight et al	C1	H&TC Sec-23 Blk-4	Abandoned location	
Bradstreet-Grisham	1	H&TC Sec-37 Blk-4	1931-1941	165
Empire	7A	H&TC Sec-32 Blk-4	1841-1842	183
Fain-McGaha	F11	H&TC Sec-31 Blk-4	2317-2322	90
Fain-McGaha	W6	H&TC Sec-32 Blk-4	2380-2403	28
Fain-McGaha	W13	H&TC Sec-32 Blk-4	1855-1857	186
Fain-McGaha	Y3	MEP&P Sec-43	2410-2415	37
Golding-Cochran	1J	H&TC Sec-17 Blk-4	2428-2430	110
Grayback	4	MEP&P Sec-40	1853-1860	65
Grayback	4	MEP&P Sec-40	1855-1879	95
King	3	H&TC Sec-21 Blk-4	1866-1873	80
Robertson	F3	Purnell	1879-1900	40
Staley-Wynne	G8	H&TC Sec-32 Blk-4	1853-1858	75
Waggoner	J6	H&TC Sec-25 Blk-4	1900-1901	167

Young County

Bridwell-Clark	1	YCSL Blk-25	606-618½	10
Parks et al	3	Sergeant	605-620	25
Steed-Gans	17	Wilson	626-628	17
Canyon	1	Paul Pier	2173-2184	15
Bradstreet	3B	Mauphin	805	Dry
Camp-Burton	1	TE&L Sec-1484	963	Dry
Panhandle	1B	Deitter	802	Dry
Stewart et al	1	TE&L Sec-201	862	Dry
Stafford	1	TE&L Sec-283	586	Dry
Williams et al	1	Tynes	605	Dry
Panhandle	1	Hamilton	4952	Dry

PANHANDLE—TEXAS

Carson County

Delmar	4	I&GN Sec-198 Blk-3	3188-3239	875
Morris et al	1	I&GN Sec-44 Blk-4	3275-3388	10
Midwest	2	I&GN Sec-5 Blk-9	3030-3096	225
Gulf	2	I&GN Sec-5 Blk-9	3040-3140	445
Empire	1	AB&M Sec-21 Blk-Y-2	2935-2962	28M
Skelly	15	I&GN Sec-198 Blk-3	3226-3250	600

Gray County

Texas	4	ACH&B Sec-6 Blk-1	2760-2780	182
Texas	5	H&GN Sec-29 Blk-B-2	2865-2867	1791
McMan	2	Eustice Sec-1	2653-2690	1340
British American	1	H&GN Sec-61 Blk-B-2	3030-3036	40
Texas	11	H&GN Sec-89 Blk-B-2	2960-2969	3161
Sun	2	H&GN Sec-61 Blk-B-2	2925-2932	425
Panhandle	2	ACH&B Sec-3 Blk-1	2630-2845	20
McMan	1	H&GN Sec-31 Blk-B-2	2883-2911	460
Gulf	1-A	H&GN Sec-33 Blk-B-2	2876-2880	3750
Anderson et al	1	I&GN Sec-152 Blk-3	3367-3369	90
Amagray	2	H&GN Sec-9 Blk-26	2920-3045	8M
Ray-Massie	4	H&GN Sec-51 Blk-25	2952	Dry
Panhandle	1	ACH&B Sec-3 Blk-1	2960	Dry

Hutchinson County

Oil Oper.-Marland	2	H&TC Sec-82 Blk-46	2996-3030	9
Phillips	1	A & B Sec-34 Blk-"Y"	3044-3051	980
Danciger	1	I&GN Sec-125 Blk-4	3039-3052	150

Moore County

Phillips	5	Robinson	Abandoned location	
Barnsdall	1	Sec-5 Blk-M-2	3510	Dry

Wheeler County

Lone Star	1	H&GN Sec-91 Blk-17	1762-1889	14M
Anderson	1	H&GN Sec-71 Blk-17	1710-1770	7M
Texas	1	H&GN Sec-53 Blk-17	1970-2060	12M
Martin-Debons	1	I&GN Sec-69 Blk-17	1844	Dry

WEST TEXAS

Howard County

Moody	15B	W&NW Sec-137 Blk-29	2595-2636	150
Amerada	11	WN&NW Sec-128 Blk-29	1303-1360	240
Owen-Sloan	11	W&NW Sec-136 Blk-29	1345-1402	240
Cosden	5A	W&NW Sec-129 Blk-29	1511	Dry

Pecos County

Plymouth	2	TORR Sec-29 Blk-178	1772-1858	46
Tidal	1	University Sec-16 Blk-20	1602	Dry
Roxana	1	University Sec-23 Blk-26	5204	Dry

Completions in North Louisiana and Arkansas, Week Ended August 8, 1929

Louisiana—Claiborne Parish

Company	Well	Location	Depth	Yield
Southern Crude Oil Purch. Co.	Christian No. 1	22-23-6E	3006	dry, aband.

Caddo Parish

Shreveport Oil Corp.	Cheshire No. 1	32-21-15	1640	10 bbls.
Texas Co.	Levee Brd. No. 69	27-21-16	1840	55 bbls.
D. C. R. Oil Co.	Oden No. 1	20-19-14	2423	15 bbls.
Standard Oil Co.	Hunter No. 6	17-19-14	2418	20 bbls.
Woodley Pet. Co.	Knight A-4	..-16-12	1935	2M gas

Bossier Parish

Palmer Corp.	McDade No. 2	13-17-12	1900	2M gas

LaSalle Parish

Gardner, Harper & Brown	Harper No. 13	23-10-1E	1510	30 bbls.
Montague Oil Co.	Zenoria Lbe. Co. No. 7	11-9-1E	1288	300,000 ft. gas

Morehouse Parish

Nat. Gas Prod. Co.	Tensas Delta No. 15	4-22-4E	2220	2M gas

Ouachita Parish

West Va. O. &G. Co.	West Virginia No. 8	8-18-4E	2203	6M gas

Richland Parish

Int. Gas Prod. Co.	Beck No. 1	25-16-6E	2460	51M gas
Northern La. Nat. Gas Co.	Boykin No. 2 (Relief Well 1)	20-17-6E	535	blows wild
Palmer Corp.	Jones A-1	22-17-6E	2457	6M gas

Union Parish

Sundby et al.	Security Trust No. 1	6-23-1E	2300	dry, aband.

Webster Parish

Ohio Oil Co.	Bodcaw No. 43	24-21-10	4639	5½M gas

Arkansas—Ouachita County

Standard Oil Co.	Powell No. 7	34-15-15	1975	100 bbls.

Union County

Root Ref. Co.	Oliver No. 1	18-17-13	3308	dry, aband.
Lovett et al.	Goodwin No. 1	3-16-16	3195	SW aband.

East Texas—Panola County

Nemours Corp.	G. E. Brumble No. 5	B. C. Jordan HRS	2300	1½M gas

Valve Travel Problems in Deep Well Pumping

By Paul Wagner
N. P. N. STAFF WRITER

HOUSTON, Aug. 10

WITH the development of deep production in the various fields the problem confronts the industry of finding some new method of lifting oil to the surface after wells have stopped their natural flow.

That method will have to be developed along some line to give more valve travel in the pump, in the opinion of L. E. McKinney, Spindletop field foreman of the Rio Bravo Oil Co., in Gulf Coastal Texas.

The question is not one of power, he says, adding that power of unknown quantity can be developed at the well head. That, he asserts, is only a matter of larger machinery, entailing slightly greater investment cost and probably small additional power expense.

Research is going on now, and has been for some time, on an electrically driven pump, either centrifugal or reciprocating, to be installed at the bottom of a well or at any point that may be desired.

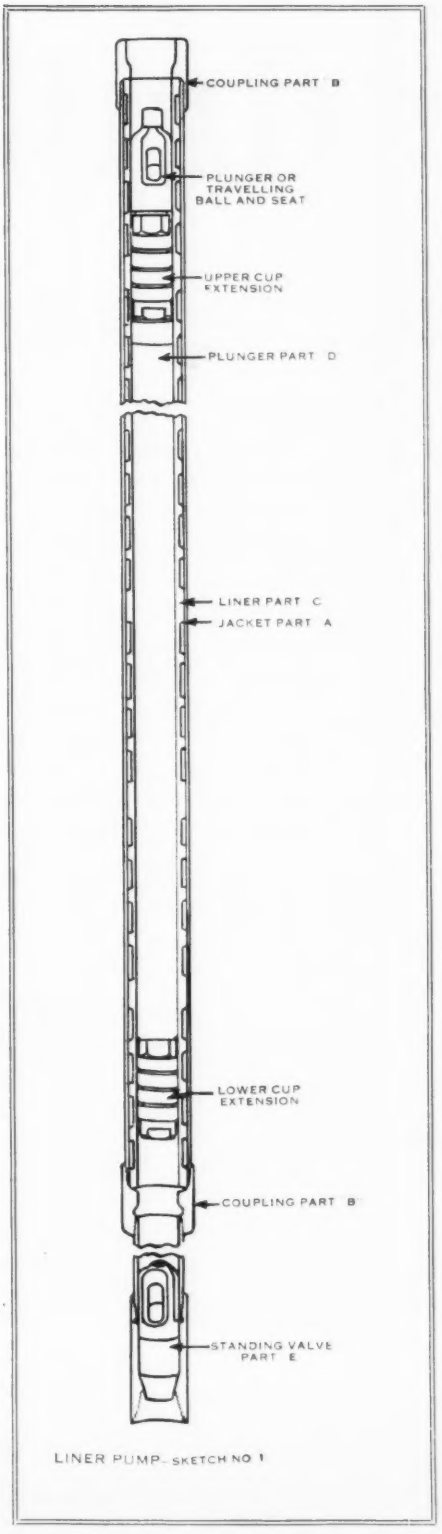
Not much is known of the development but, as viewed by Mr. McKinney, the difficulties that will have to be overcome are numerous. He refers to the insulating of the naturally high current which must be delivered to the pump; the enclosing of the pump to keep the fluid and gas away; and the proper lubricating of the pump and motor over a long period of time.

Referring to investigations to determine the efficiency of equipment in deep well pumping, Mr. McKinney says:

"There has been recently perfected an instrument, which is placed on the polish rod above the carrier bar and below the polish rod clamp, called the dynamometer. This charts from the variable pressures the inefficiencies that occur in the cycle of pumping.

"The instrument is somewhat similar to the Martin-Loomis weight indicator, which is used in connection with drilling. However, it only tells what is known, or can be learned from practical experience, and does not give any information on how to eliminate troubles."

One method of pumping that is being used by the Rio Bravo Oil Co., on some of its wells at Saratoga, is described as worthy of special mention. It is being used on wells making considerable sand with the fluid. In this method, 2½-inch tubing is run with a pump jacket, which is the usual Hough or National steel working barrel with special made plunger.



LINER PUMP—SKETCH NO. 1

In place of solid steel sucker rods, on which to run the plunger, 1¼-inch steel tubing is used inside the 2½-inch tubing. The fluid, instead of passing out through a cage into the 2½-inch tubing at the top of the plunger, goes through a seat in which a ball works; on up through the 1¼-inch tubing.

The entire column of fluid is positively moved at each stroke, agitating it and eliminating any dead fluid, in which it is easy for sand to settle out. It is necessary to use a flexible hose to connect to the lead line at the well head, because of the 1¼-inch tubing being used instead of rods.

Mr. McKinney has found the biggest item in deep pumping deals with large volumes of fluid containing high water content. This is described as more specially true where the rig is so designed that it is necessary to run a short, fast stroke.

With 100 per cent efficiency in valve travel, Mr. McKinney says, the same amount of fluid would be moved in a similar period by a 48-inch stroke, 30 strokes per minute, and a 72-inch stroke, 20 strokes per minute.

"You will note," he says, "there is one third more length of stroke in one and there are a third more strokes in the other, so theoretically there should be the same amount of valve travel.

"But figuring 12 inches loss of stroke, due to inefficiencies caused by rod stretch and recoil, and the motion of tubing, then you would have 1080 inches of valve travel per minute with the 48-inch stroke and 1200 inches with the 72-inch stroke.

"In the fast stroke, the wear of the liners at the point where plunger is traveling would be one third faster, due to the cups traveling one third more times over the same surface in the same length of time."

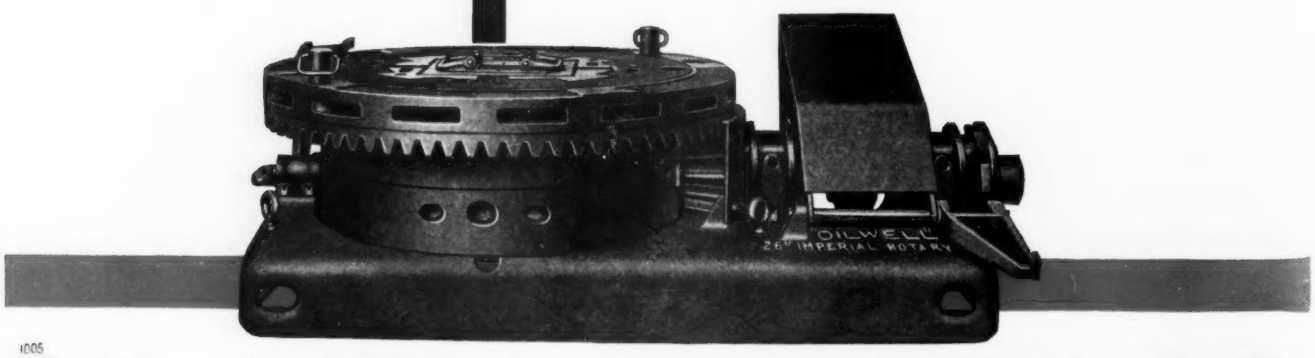
Continued stretch and recoil of the steel sucker rods causes crystallization and breakage, resulting in approximately a third more of this trouble in the short, fast stroke. This will cause more fishing of rods and necessitate the pulling of cups in the liner type of pump.

In fishing rods and pulling cups out

Built for.... deep well drilling

THE "Oilwell" 26" Make-and-Break Rotary has been designed to drill deep and large holes with maximum efficiency. Tool joints and drill pipe or casing can be made up or unscrewed with this rotary without turning the pipe in the hole. The gear is cut and heat treated. The pinion shaft operates in two bearing housings, each housing carrying two sets of Timken Bearings with a working capacity much in excess of what is required. These bearings take up all lateral thrust of the pinion shaft due to the bevel gear. The base is made in one piece and also constitutes the skids. "Oilwell" Make-and-Break Rotaries also made in 20" and 17" sizes. Non-make-and-break rotaries made in 27", 20" and 16" sizes.

For complete information on "Oilwell" Rotaries, inquire at any of our branch offices or write for Bulletin No. 71.

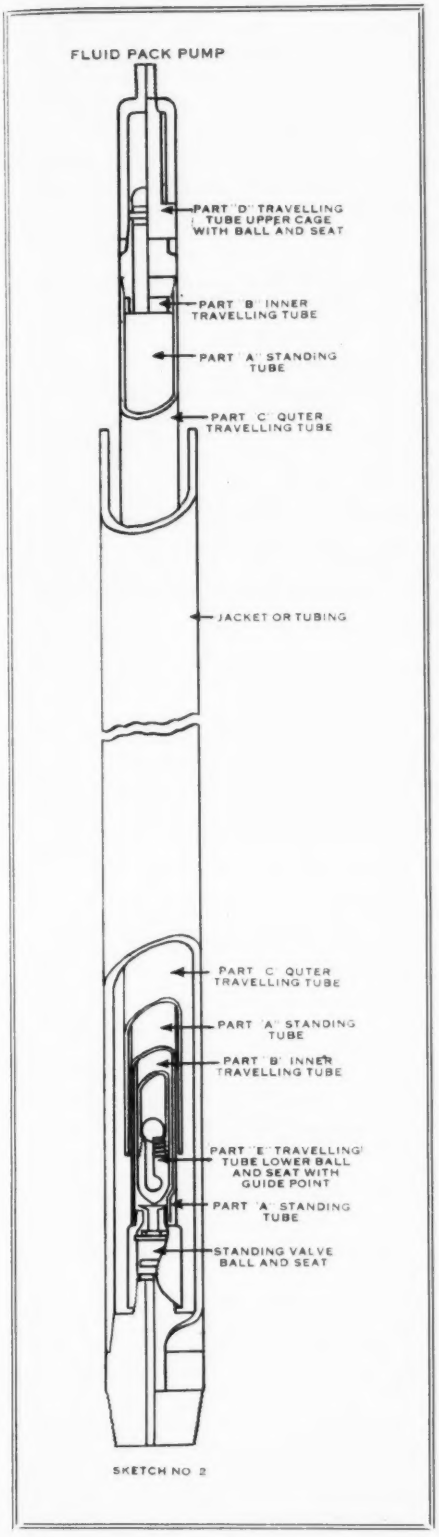


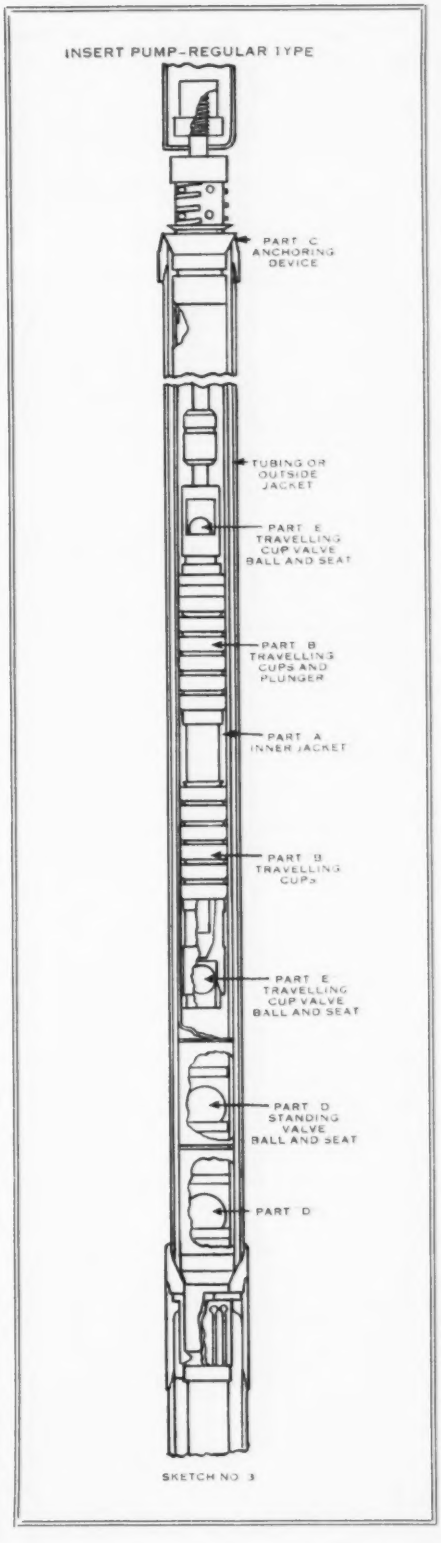
1005

OIL WELL SUPPLY CO.

NEW YORK—LOS ANGELES—PITTSBURGH, U.S.A.—SAN FRANCISCO—TAMPICO—LONDON

WORLD'S OLDEST AND LARGEST MANUFACTURERS OF OIL FIELD EQUIPMENT


FLUID PACK PUMP
PART "D" TRAVELLING TUBE UPPER CAGE WITH BALL AND SEAT
PART "B" INNER TRAVELLING TUBE
PART "A" STANDING TUBE
PART "C" OUTER TRAVELLING TUBE
JACKET OR TUBING
PART "C" OUTER TRAVELLING TUBE
PART "A" STANDING TUBE
PART "B" INNER TRAVELLING TUBE
PART "E" TRAVELLING TUBE LOWER BALL AND SEAT WITH GUIDE POINT
PART "A" STANDING TUBE
STANDING VALVE BALL AND SEAT
SKETCH NO. 2


INSERT PUMP—REGULAR TYPE
PART C ANCHORING DEVICE
TUBING OR OUTSIDE JACKET
PART E TRAVELLING CUP VALVE BALL AND SEAT
PART B TRAVELLING CUPS AND PLUNGER
PART A INNER JACKET
PART B TRAVELLING CUPS
PART E TRAVELLING CUP VALVE BALL AND SEAT
PART D STANDING VALVE BALL AND SEAT
PART D
SKETCH NO. 3

of pump, especially if parted reasonably deep in a well, Mr. McKinney thinks it is better to pull out and put on new cups. In a pump that has been running sufficiently long for cups to wear the liner, he considers it good practice to space the rods exactly the same when running new cups back into the pump, so as to have the plunger travel in the same worn space in the liner. If this is not done the cups will not last long and there will be a jerk in the rods on the upstroke, which tends to fracture the rods.

When screwing on, Mr. McKinney never allows rods to be picked up or plunger and cups to be removed from the pump. He lets the rods down with the clamp on the polish rod until they come in contact with the rods below.

If the spacing is such that the greater part of the polish rod is nearly all in the well then a section of old polish rod is added so as to be able to reach rods in the hole. After screwing on, it is practice to pick the rods up and place the polish rod clamp at the same place on the polish rod that it was, so as not to change the spacing of plunger and cups in the pump.

Another rule, which is not so necessary when using left lay line, is setting rods on bottom when in the hole with them, taking a pair of chain tongs and a piece of 2½-inch pipe and snapping up the whole string. With a right lay line, Mr. McKinney has found that no matter how well the hook swivels there is a tendency to loosen all the joints while running in the hole, thereby causing them to be unscrewed later in the pumping operation.

A requirement that is not as insignificant as it may at first seem is the use of clean hands, and not dirty gloves, when dressing valves with cups and balls, or seats. Mr. McKinney points out that it is easy to get sand or steel cuttings between the joints of the assembly and in seat recesses, or between cups and followers.

If for any reason pumping equipment is going to lay out of the hole for a day, or longer, while working on a well, Mr. McKinney requires thorough greasing of valves, plunger, barrel and other material.

Discussing what is commonly called gas locking of a pump, Mr. McKinney says:

"This is the compressing of the gas in the fluid in the pump. The larger the pump and the longer the plunger the more gas fluid you will have to compress on the downward stroke. This is especially the case when the traveling valve ball and seat is in the upper end of the plunger; also the greater the depth from which you are pumping the greater will be the weight of the column of fluid above the plunger to compress the gas-fluid taken into the tubing on the down stroke.

"For example, our well No. 5 at Guffey (Spindletop) makes approximately 100 barrels of fluid, about 50 per cent water, with considerable gas.

"Gas locking occurs more noticeably after pulling and installing new cups or a new pump. This is due to the tight equipment retarding, to a certain extent, the valve travel. However, it is noticeable intermittently at any time.

"When pulling this well the fluid will head up and kill the gas. Naturally, the water is under the oil in the hole, so immediately on resuming pumping operation the first thing you do is to fill the tubing with fluid, mostly water.

"After this water is pumped into the tubing from the casing it relieves the pressure on the sand and allows the passage of more free gas, which has been confined in the sand. The gas mixes with the oil and water and is taken into the pump through the standing valve.

"Pressure of the column of fluid outside the tubing exerts a pressure under the standing valve ball and helps raise it. With this fluid head removed you will only compress the fluid and gas in the pump chamber until the well heads up sufficiently high in the casing to exert the necessary pressure and break up this locked condition.

"I have seen wells, especially where casing head line and lead line were connected to a separator, in which the opening of the bleeder would release sufficient pressure to break up this gas lock. In other cases, where wells were spaced with the plunger high in the pump, lowering of the plunger would break up the locked condition.

"The best solution to this condition is the close spacing of the plunger valve ball and seat, so that on the downstroke the plunger will remove as much fluid as possible from the pump. This can be done by placing on the bottom of the plunger a cage with ball and seat."

Pumps shown in sketches numbered 2, 3 and 4 are equipped in the manner mentioned. Manufacturers of the liner type pump shown in sketch 1 will furnish this connection to run on their liner pump plunger if it is desired to run cups on top of plunger. In case of running cups on lower end of plunger they do not have this fitting, but it can be made.

The liner type pump, sketch 1, consists of part "A," jacket, which is a steel tube, one-quarter inch thick and of the desired length, usually 10 or 11 feet. The tube is threaded at each end for couplings, part "B." These couplings have a shoulder inside them and this shoulder has the same inside diameter as the liners, part "C." These liners are held in place in the jacket by the shoulder in the coupling. The liners are made in lengths of only 12 inches.

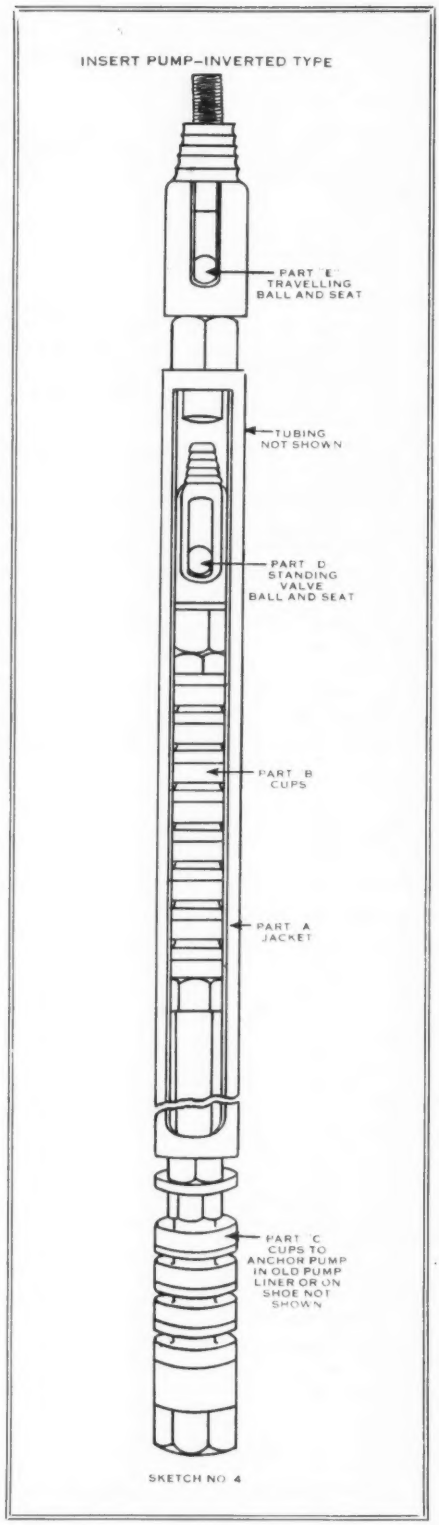
This is the feature which makes this type of pump superior to the old style steel working barrel. The liners are made of gray iron and machined to the highest mechanical perfection, which is not possible with a tube of much greater length.

The plunger, part "D," fits the pump with only a clearance of .0005-inch and will pump some of any kind of fluid. It will not, however, pump as much as cups, due to slippage of fluid past the plunger.

Part "E," the standing valve, fits on the bottom of the pump. There are two types of these valves which are more or less generally used. First, there is the removable type shown in the sketch. The other is the screw type, which fits into the bottom of the coupling at the base of the pump. For both of these types there are various sizes of standing valves.

The Fluid Packed pump, shown in sketch 2, has no packing or cups; depending on three tubes, 15 feet long, one stationary and two moving, to set up enough resistance to the fluid. They fit relatively close, so as to allow only a small part of the fluid pumped to circulate back between the tubes during the cycle of the stroke.

Part "A," the standing tube, is anchored in the bottom of the pump. Part "B," inner traveling tube, may be compared to the plunger in the liner pump. Part "C," outside traveling tube, is jointed at the top to part "B," inside traveling tube, at the cage with ball and seat, part "D." Part "E" is a small cage with ball and seat on the bottom of part "B," inner traveling tube.


INSERT PUMP–INVERTED TYPE
PART E TRAVELLING BALL AND SEAT
TUBING NOT SHOWN
PART D STANDING VALVE BALL AND SEAT
PART B CUPS
PART A JACKET
PART C CUPS TO ANCHOR PUMP IN OLD PUMP LINER OR ON SHOE NOT SHOWN
SKETCH NO. 4

The principle of this is to eliminate the long column of dead fluid standing in the 15 foot stationary tube from compression with each downward stroke. It is described as a highly efficient pump for deep work where there is a limited amount of fluid to handle.

Sketch No. 3 represents an inserted type of pump. To install, it is necessary to pull the tubing and place on the bottom of the string an outer jacket consisting of a plain piece of tubing 10 feet long and of the same diameter as the tubing.

The pump has a device in it with which to lock the inner jacket. It is not necessary to pull tubing unless the well sands up or a leak develops in the tubing. After installing this jacket the remainder of the pump is completely assembled and run in on the rods.

Referring to the sketch, it will be noted it has an inner jacket marked part "A," in which cups, part "B," travel. The other parts, "C," "D" and "E," are respectively, the anchoring device, the standing valve ball and seat and the traveling cup ball and seat.

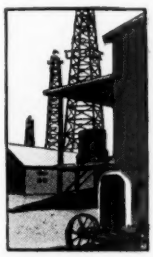
Sketch 4 represents another type insert pump which, however, differs greatly in principle from the foregoing. The cups are stationary in the bottom of tubing string while pumping. As may be noted, the lower end of cup plunger is equipped with large cups which are to anchor plunger in the old pump liner. The weight of the column of fluid in the tubing upon these cups holds the plunger in place while pumping.

The sketch does not show any outer jacket, or barrel, as it is to be anchored in the old pump, part "B," cups, are stationary and they are inverted. The jacket, part "A," which encases the cups, travels with the rods creating a vacuum on the upstroke and takes in the fluid through the plunger into the traveling jacket. On the down stroke the fluid is forced through the ball and seat in the top of the jacket out of the tubing. The manufacturers stress this feature as the reason for long life and easy running of the pump.

Continental Oil Co. will lay 55 miles of line to connect its Wichita Falls district system with the Cook pool of Shackleford county, Tex., where Continental and Roeser & Pendleton, operating in partnership, produce most of the field's output. Continental will also connect its northern Oklahoma pipe line system with the Continental system in the Seminole district.

New Colombian Petroleum Bill Regarded As Prohibitive of Development

By Roger B. Stafford
N. P. N. STAFF WRITER



CONTENTS of the petroleum bill that was introduced in the Columbian congress July 23 have disappointed American oil companies that had hoped to get concessions in that South American country for future development.

Royalty or production tax rates are considered high and belief was expressed by some of the producing companies whose foreign departments are in New York that the bill, if enacted, would stifle future production efforts, if the bill is as severe as the cable summaries indicate.

The bill also would affect production from the only operating concession in Colombia at present, the De-Mares concession operated by the Tropical Oil Co. (Standard Oil Co. of New Jersey), it is said, and the Barco concession held by the South American Gulf Oil Co. (Gulf Oil Corp.) which concession is now in litigation in the Colombian supreme court.

The bill was drafted by Dr. Jose A. Montalbo, minister of industries, following a report to him by a commission of foreign petroleum experts. This commission consisted of Sir Thomas Holland, former director of the Indian Geological Survey and minister of munitions of Great Britain during the World War; S. Gonzalez Cordero, the Mexican expert; Dr. Aurel Iancoulesco, who was secretary of the commission that revised the Rumanian petroleum law last winter, and Dr. H. Foster Bain, formerly director of the United States Bureau of Mines and now secretary of the American Institute of Mining and Metallurgical Engineers.

Dr. Bain was assisted by J. W. Steele, supervisor of the Rocky Mountain region for the U. S. Geological Survey and formerly superintendent in Wyoming for the Producers & Refiners Corp., and Jose Amador Ibarra, of the Huasteca Petroleum Co. in Mexico.

Dr. Bain this week said he had not yet received a copy of the Colombian bill and could not comment on whether it followed the commission's recommendations as to Colombia's protective needs in the development of that country's petroleum resources. He said the commission's report was confidential so he could not compare the recommendations with the cabled summaries.

The new bill which is to replace the emergency law passed in 1928, contains 53 articles. These articles provide for the method of granting concessions, the proving of titles, the duration of concessions for producing and pipeline properties, the issuing of stock and securities 20 per cent of all classes of which must be offered in the Bogota market, the royalties for development on public lands, the employment of native Colombians, pipe line tariffs, and numerous incidental items.

So far as petroleum concessions are concerned, Colombian lands are classified as private or public lands. Private lands are those that were granted (adjudicated is the word used by men who have dealt in that country), to individuals prior to 1873. These lands carry subsoil rights. In lands adjudicated after 1873 the Colombian government retained the subsoil rights and some 700 applications for development of these government lands have been pending for several years but no concessions have been granted.

The bill provides for the payment of royalties or production taxes for oil taken from public lands in one of three ways at the option of the government and no provision is contained that only one method of collection shall be used by the government during the 30-year life of the concession or the 10-year extension provided.

The first method is that the royalty shall be 10 per cent of the price of the oil payable at the seacoast or up to 200 kilometers inland after the cost of transporting the oil to the market has been deducted from the price at the market, New York, for example; 8 per cent if the royalty is payable 200 to 500 kilometers inland, and 6 per cent above 500 kilometers inland.

Under the second method the royalty is to be a flat 12½ per cent at the place of production.

The third method provides for a graduated royalty based on the total daily average output, probably of a well but the cabled summaries do not state this. This method provides for a 6 per cent royalty on the first 10,000 barrels production, 12½ per cent for the second 10,000 barrels, and an in increment of 2½ per cent for each additional 10,000 barrels.

Because of the expense and difficulty of getting drilling equipment and supplies into the interior of the country and the difficulty of getting the crude oil to a market—there is no market in Colombia—producing companies believe these rates are prohibitive.

Also because the government, under the bill, would not be required to hold to one method of royalty payment or another during the life of a concession, the development companies would not know where they would stand from royalty payment time to another.

The concession seeker also would be forced to submit to the ministry of industries a title to the private land on which a concession was sought. This is virtually impossible, oil men point out, because up to 1902 there were several revolutions in Colombia during which many records were burned. Heirs of the original grantees have lived on the lands adjudicated prior to 1873 but because the documents were burned in revolutionary periods, there are no official records of their titles to the lands.

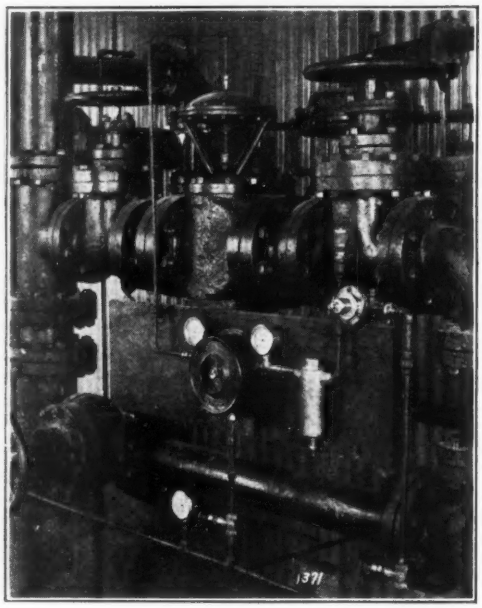
A royalty of 5 cents per thousand cubic feet is provided for natural gas when sold or used commercially or 1 cent per thousand when wasted. Royalty on natural gasoline is to be 3½ per cent at the producing company's selling price but at no time is the selling price to be less than 10 cents a gallon. Gas used in development is deductible from royalty payments but burning of wet gas is prohibited.

Leases are to be 5000 to 50,000 hectares (a hectare is 2.471 acres) and the length shall be two and a half times the width with the government reserving a similar area in the zone for future development, the bill provides.

Concessionaires are to post bonds of 5 pesos per hectare ($5 in U. S. money) and never less than 100,000 pesos. The annual rental for concessions is to be 50 centavos (50)

Tycos Back Pressure Regulator

(*Pilot Operated*)



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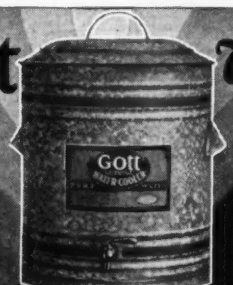

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cents) per hectare the first year and up to 2 pesos after the fifth year.

After the second year a concessionaire may return areas of not less than 5000 hectares to the government with a reduction in bond and rentals.

Where different applicants seek the same territory preference is to be given as follows: 1, priority; 2, closest proximity to exploitations of the same petitioners; 3, largest area requested; 4, consideration of surface owner, and 5, by lot if the foregoing conditions are equal.

The government proposes to take preference in transmitting its oil through pipe lines at a tariff to be based on amortization, operating expense and a profit of 8 per cent in the case of common carrier lines, and 6 per cent for private lines.

The bill also provides that producers not operating under previous contracts with the government must pay the government 5 per cent of the pipe line tariff when they use common carrier pipe lines that exist before the passage of this bill. That provision can have only one interpretation: there is only one concession operating in Colombia, that of the Tropical Oil Co., and it transports its oil through the common carrier line of the Andian National Corp., which is affiliated with the International Petroleum Co., another Standard of New Jersey organization.

Contracts for the building and operation of pipe lines are to exist for only 30 years at the end of which time the lines are to revert to the government.

For the building of a refinery in Colombia only a government permit is necessary if the building company accepts control of prices by the ministry of industries.

At least 10 per cent of the higher salaried positions with the development companies would have to be filled with Colombians when the companies began operations, if the bill should pass, and 25 per cent natives after three years.

The provision that 20 per cent of all classes of capital stock of concessionaires must be placed in the Bogota market, is particularly displeasing to those companies which own 100 per cent of the capital stock of foreign development subsidiaries. In the case of the present one operating concessionaire all its stock is owned by the International Petroleum Co.

A permit must be obtained from the ministry of industries to drill or abandon any well.

The government petroleum reserves comprise the Department of Santander and lands east of the eastern range of the Andes in the departments and provinces of Boyaca, Cundinamarca, Meta, Aranca, Vichada and Vaupes.

Skelly Can Go Slow Drilling Its Schafer, 12,640 Acres in One Block

By Lawrence E. Smith
N. P. N. STAFF WRITER

AMARILLO, Tex., Aug. 10

AN IDEAL unit development is where one company owns all the producing acreage. Seldom is it possible to realize this condition, although the tendency in extreme wildcat territory is for the company which finds the probable producing structure to lease everything on it and a little over, just to play safe.

In the Panhandle territory of Texas various companies own large blocks of acreage, easy to acquire several years ago because they were blanket leases on big ranches. Two of the outstanding ones in the district belong to the Skelly Oil Co., being the Schafer ranch, southeast of the Borger field and the Armstrong-Byrd property, northwest of Borger. Each is a huge domain in itself, the Schafer acreage under lease to the Skelly comprising 12,640 acres and the Armstrong-Byrd taking in more than 17-000 acres.

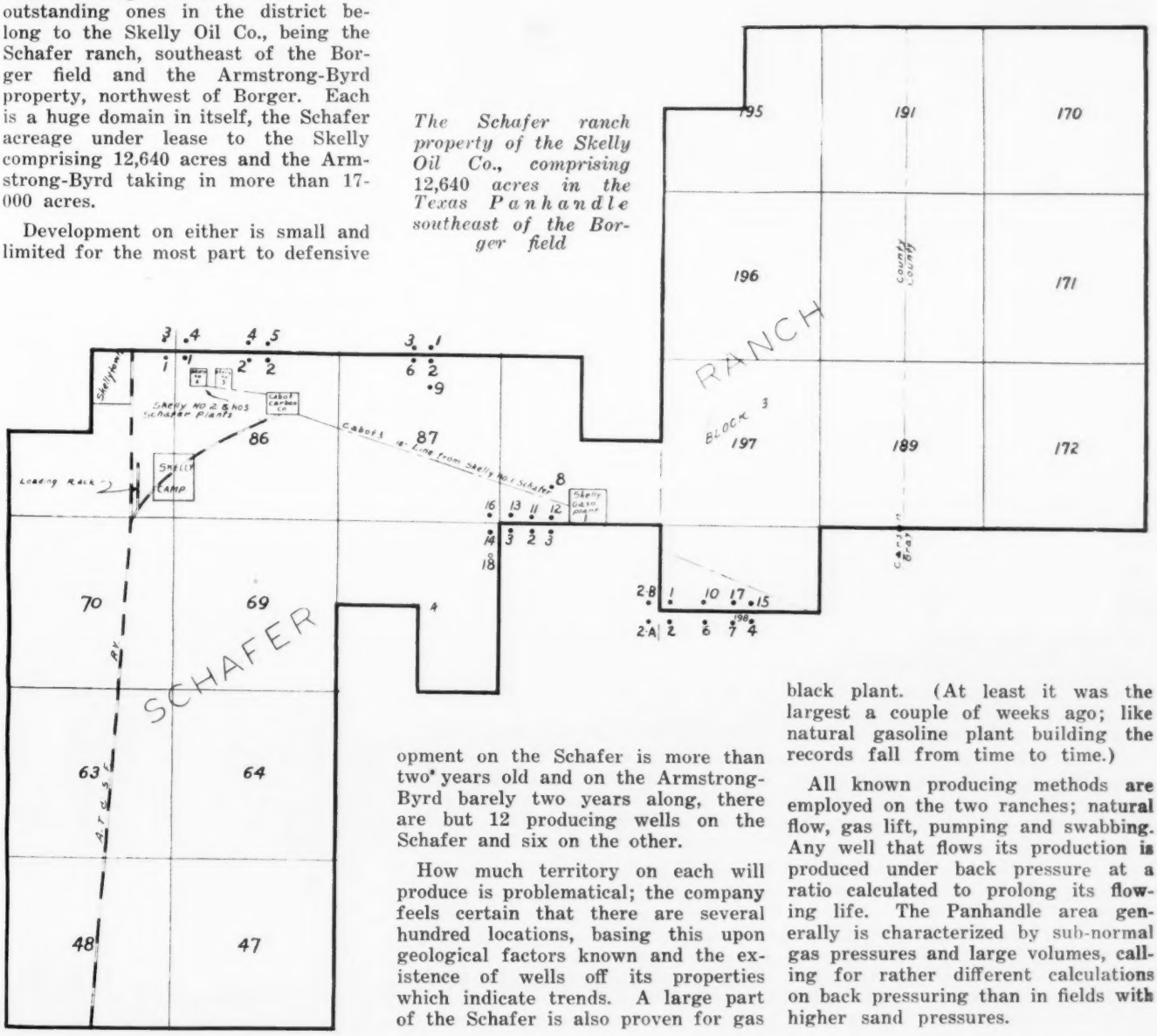
Development on either is small and limited for the most part to defensive drilling along the lines of the property. One can, however, stand on these two properties—or, better, ride over them, taking plenty of time to do it for it is no short hiking trip to get about—and see the years that will be required to fully develop them at the rate the Skelly company has been going.

There has been no rush. When a neighbor drilled a well along property lines, Skelly offset it and let it go at that until another offset was required. As a result, although development on the Schafer is more than two years old and on the Armstrong-Byrd barely two years along, there are but 12 producing wells on the Schafer and six on the other.

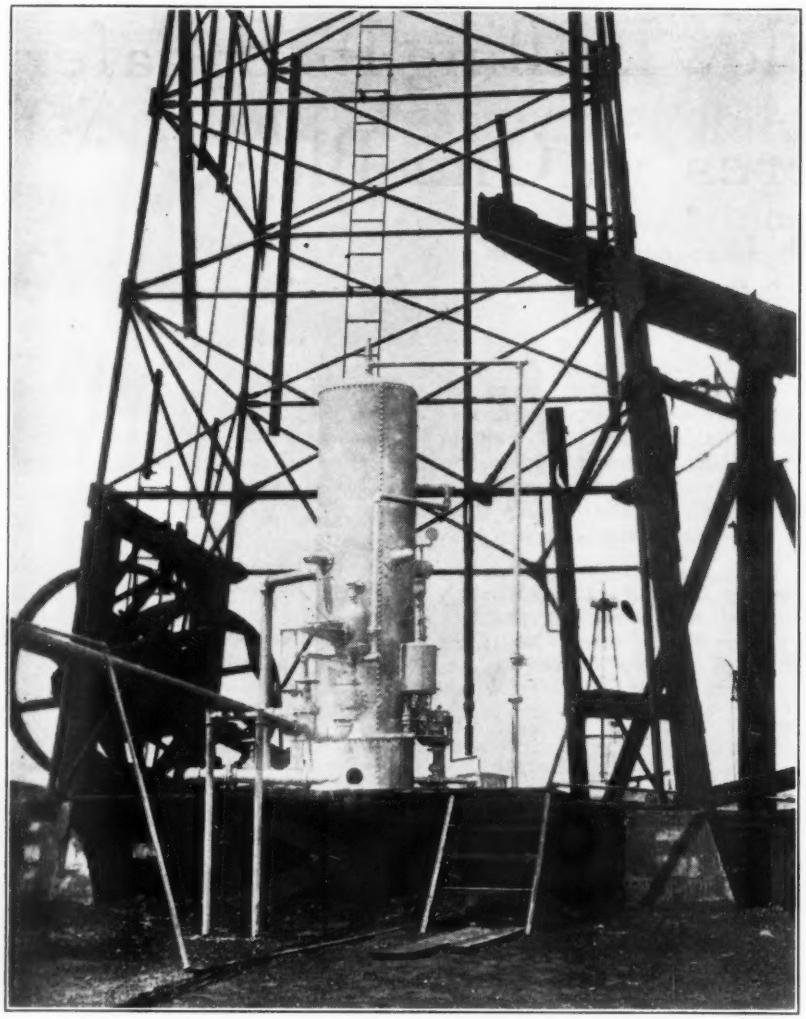
How much territory on each will produce is problematical; the company feels certain that there are several hundred locations, basing this upon geological factors known and the existence of wells off its properties which indicate trends. A large part of the Schafer is also proven for gas which, with the present and prospective market facilities—trunk lines going to distant points such as Denver, Kansas City and the projected one to Chicago—constitute a reserve as valuable as oil.

The Schafer property, being a little farther along in oil development and scope of territory outlined, naturally has been pushed farther in other respects. On this property is a large gasoline plant, taking the wet gas from the oil wells and delivering the residue to the world's largest carbon black plant. (At least it was the largest a couple of weeks ago; like natural gasoline plant building the records fall from time to time.)

All known producing methods are employed on the two ranches; natural flow, gas lift, pumping and swabbing. Any well that flows its production is produced under back pressure at a ratio calculated to prolong its flowing life. The Panhandle area generally is characterized by sub-normal gas pressures and large volumes, calling for rather different calculations on back pressuring than in fields with higher sand pressures.



The Schafer ranch property of the Skelly Oil Co., comprising 12,640 acres in the Texas Panhandle southeast of the Borger field



Tanks and separators are coated with aluminum paint

Naturally, with development as unhurried as it has been on these properties it has been possible to plan far ahead and make preparations for future development on a basis that will represent good housekeeping on the property at every stage. That generalization includes also the matter of well spacing. Boundary locations heretofore have been drilled on a 660-foot basis—330 feet from the Skelly line and the same distance from that line the neighbor drilled his well. That is the orthodox well-to-10 acres basis followed in most fields of the Mid-Continent and Texas now.

The Skelly company is giving thought to increasing this distance as it drills its "inside" locations and it will possibly come to a 990-foot spacing. It is believed that, with the long lived characteristics displayed by the wells now producing, the final recovery of oil on the broader spacing pattern will be near enough to that which would be recovered on closer spacing to effect a great saving in development costs.

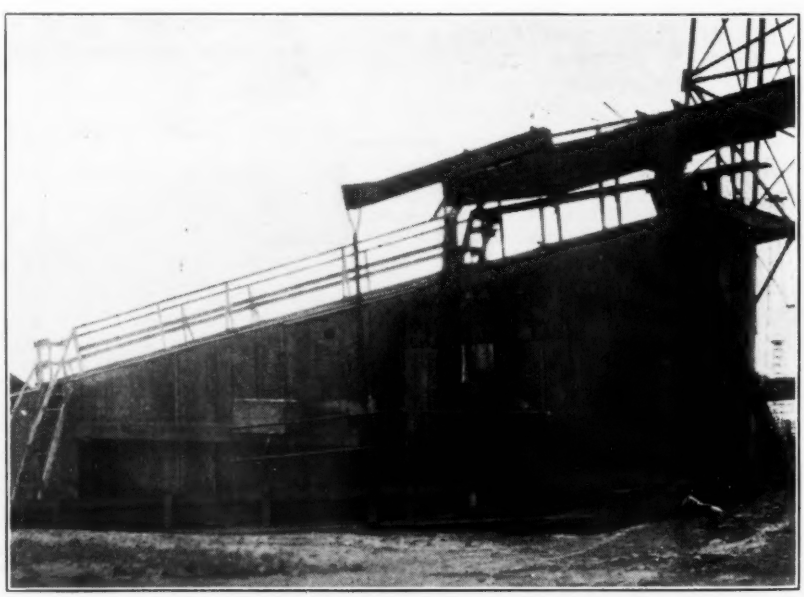
The Schafer ranch, farther advanced in development than the Armstrong-Byrd, has been under lease to the Skelly for some years. Development by the Gulf Production Co. and others to the south led to the drilling of the first Schafer well, completed April 13, 1927, with initial production of 500 barrels for the first six hours. It is still making its 150 barrels daily, with about six million cubic feet of gas daily. It has always flowed.

From this start wells were drilled as offset requirements demanded. Through most of this period the price of Panhandle district oil was low and the ranch was treated as a reserve for that future when its oil would be in greater demand. At this time four wells are drilling on the Schafer, and three on the Armstrong-Byrd, and this program of slow development will be maintained.

Average drilling depths to completion of well on the Schafer ranch are 3000 feet and on the Armstrong 3150 feet. Pay is the regular granite wash formation which produces in the Borger field, although at places a lime formation fingers in which has the principal accumulation of oil. The difference is important, as the production from the lime has much less sulfur and the oil is of higher gravity. Gravity of the oil on the Schafer ranch ranges from 33 to 41 degrees A.P.I., with a little as high as 44 degrees.

Total production from the Schafer ranch up to July 23, inclusive, was 811,916 barrels and from the Armstrong-Byrd to July 18 was 559,474 barrels.

The district in which the Schafer ranch is situated has the appearance of a fully fledged oil field. Adjoining the ranch property is the Roxana pool and Skellytown, a community containing the usual business establishments is at the edge of the property. The Santa Fe railway early in the development of the ranch built a branch railroad from White Deer which enjoys a substantial business, handling the gasoline output of plants on the Schafer ranch and in the Roxana pool and the carbon black shipments from several plants in the region.



Pumping rigs have safety stairs and guarded walkway

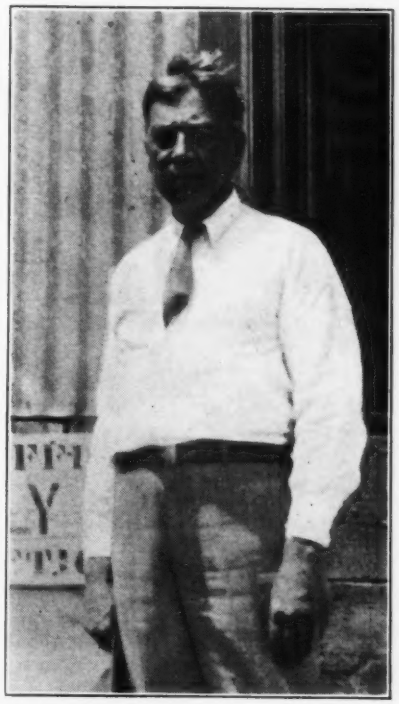
There is complete utilization of the gas produced on the two ranches. It is first processed in natural gasoline plants, then the residue is burned for carbon black manufacture. This latter has grown to be one of the big industries in the Panhandle district. Use of gas in this way is permitted by the state provided the gasoline has been extracted and, of the 300 to 325 million pounds of carbon black—the present annual rate of production in the United States—about 60 per cent is made in the Panhandle. At one point on the Schafer ranch, on a clear day, one can see the palls of smoke over 15 plants.

The largest plant in the world, as previously remarked, is on the Schafer ranch. It is owned and operated by the Cabot interests. Burning 55 million feet of gas per day it has a production of about 70,000 pounds of carbon black per day, or more than 25 million pounds annually—better than seven per cent of the total annual production in the United States. To burn all this gas nearly a million burner tips are required.

The gasoline plant on the Schafer ranch is in process of being remodeled and much additional equipment installed. It has been handling around 40 million feet of gas daily and its maximum output rating was 22,500 gallons daily. When remodeled it will have a capacity of 40,000 gallons daily.

In pursuance of its good housekeeping idea, which, by the way, is much in evidence on its producing properties everywhere, the Skelly company employs the best of equipment, keeps it in condition and is quite liberal in the use of paint. While some tankage was installed in the early stages of development that was not gas tight, replacements are of the gas tight variety designed to maintain the gravity of the oil. At this time, as men are spared from other duties, they are set to coating lease tankage and separators with aluminum paint.

No mud or muck around flow tanks. An underground conduit carries away water that is "bled" from the tanks



F. P. Graham, general superintendent of Panhandle district, Skelly Oil Co.

In short, as any work is done on the Armstrong-Byrd and Schafer properties it is planned, not as an expedient for the momentary tiding over of a current situation, but with a view to the undoubted long life these reserves will have both from an oil and gas standpoint. The operating machinery is flexible in nature and can be speeded up or slowed down as the state of the market demands.

New Baby American Car Uses Little Gasoline

CLEVELAND, Aug. 10.—Add another entry to the list of prospective automobiles that will help to conserve the gasoline supply. This one is an American car designed by James V. Martin, an airplane manufacturer of Garden City, N. Y.

The new car, several of which have already been built, has a wheel base of only 60 inches as compared with 75 inches in the Austin Seven and 103½ inches of the Model A Ford. It has traveled more than 50 miles an hour over rough roads, according to New York newspapermen who have been taken for rides, and will do more than 50 miles on a gallon of gasoline.

The car has a four-cylinder air-cooled engine and is of distinctive design, not being merely a large car scaled down. The car has no chassis frame but the body frame forms the skeleton on which are mounted the engine and wheels.

It has no axles, as axles are known to other cars, and no springs. The wheels are suspended from the body frame with aviation cord, a rubber device which is used in suspending airplane landing gear without the use of springs.

Each wheel takes a road shock independently of the other wheels or the body.

The car weighs only 600 pounds and a strong man can shift it around easily without using the motor. It is equipped with starter like the standard automobiles. Instead of the usual axle drive, the car is driven directly through the wheels by means of universal joints.

Little lubrication is required, it is said. The quantity of motor oil consumed is small and all other parts can be lubricated at the factory for the life of the car, it is said. The aviation cord suspensions are durable for about 25,000 miles, the inventor claims, and can be replaced for 80 cents by any non-mechanic owner.

Mr. Martin told New York newspapermen that he is negotiating with a Wall Street firm for financing production of the vehicle and with a large mail order house for its marketing. It is planned to sell the cars in waterproof shipping cases with hinged door, and the case can be used as a garage by pushing the car into or out of it.

The selling price is expected to be around $200 although that point has not yet been determined.

TULSA, Aug. 9.—C. B. Swanner, formerly safety engineer with the Employers Casualty Co., Tulsa, has joined the Texas Pacific Coal & Oil Co., Fort Worth.

That company is expanding its safety program and Mr. Swanner will work with the safety and insurance department out of Thurber, Tex.

L. C. "Lew" Klein

Formerly vice-president and manager of the Continental Well Supply Co., Inc., New York, has resigned to become vice-president of the American Steel Export Co., 535 Fifth Ave., New York City

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Structural Development and Oil Accumulation in Texas Permian

By Robin Willis*

Abstract

Regional structure in the Permian basin is due to the sinking of basins around positive elements. In the south the sinking was combined with uplift along the Marathon fold. These structures have been modified by post-Cretaceous deformation in the mountain areas. This is of the Basin Range or block faulting type.

The limestone highs within the Permian basin are in part depositional and in part structural. The Getty high is a reef overlain by a typical compaction fold. The Winkler County high is a combination of a reef with a deformational high. The varying relations of these two factors determine the character of production encountered from Winkler County north into Lea County. The Yates high is thought to be depositional whereas the Big Lake high is thought to be structural. The evidence for and against these conclusions is analyzed.

The final determination of the character of each limestone high in the basin is to be found in the structure of the beds below the Big Lime.

THERE are three factors which must be considered in studying structural development of the Permian of West Texas and southeast New Mexico. These are: First, regional structure due to sinking of basins around positive elements; second, local structure due to deformation; and third, structure due to deposition. Oil accumulation depends upon the relation of these factors to one another and to porosity.

It is not possible to evaluate the importance of these factors in all of the producing fields of the Permian but in certain cases sufficient information is at hand to permit the tracing of the structural history with a fair degree of certainty. It is the purpose of this paper to describe these cases and point out the application of the evidence they present to the study of the other structures of the region.

Structural Features of the Basin

The broader structural features of the Permian basin in West Texas and southeast New Mexico include two principal basins divided by a double line of highs. The basin east and north of these highs may be termed the main West Texas basin, that west of them the Delaware Mountain basin. (See Fig. 1).

The two more or less parallel highs between them are the Crane, Upton and Ector county high, on the northeast, and the Ward, Winkler and Lea county high. In addition to these there are the following limestone highs in the basin: The Garza county high, the Howard and Mitchell county high, the Big Lake and World-Powell high, the Apache Mountain high, and the Getty high in Eddy county, New Mexico. These highs are mapped on the top of the Big Lime, and most of them are reflected in the beds above the lime.

The questions that arise in regard to the limestone highs are: First, how was the limestone structure itself formed; second, how was the structure in the beds above the lime formed; third, what was the age of deformation, if any has occurred; and fourth, what is the structure in the beds below the lime?

Development of Regional Structure

Two distinct periods of deformation may be recognized in the development of the major structural features of this region. The main basins were formed during Permian time, but there was little actual local deformation north of the line of the Marathon uplift. The effects of post-Permian deformation can be recognized in the mountain uplifts of the Davis, Guadalupe and Sacramento mountains, and of the smaller ranges west of the Pecos.

This deformation is probably contemporaneous with the deformation of the Basin Ranges of Utah, Nevada, Arizona and western New Mexico, and is related to the Cordilleran province rather than to the deformational effects found in the mid-continent region.

On the east a long monocline extends from the axis of the Bend arch westward to Reagan, Glasscock, Howard, Mitchell, Scurry and Garza counties. This monocline was formed by the sinking of the main West Texas Permian basin, most of the movement occurring during Double Mountain time. On the north deposition thinned over the positive element of the Panhandle arch.

On the south the Big Lime is turned up rather abruptly under the Comanchean cover, and it is thought that this represents the eastward extension of the Marathon uplift. This line was not only a positive element, but was repeatedly uplifted from late Pennsylvanian time, when it was strongly folded, until after the close of the Permian. A renewal on the old line of weakness in post-Comanchean times is shown by the doming of Comanchean beds in the Glass Mountains. The force which caused this latest uplift probably came from a different direction from that which caused the earlier uplifts.

On the west the long monocline of the Delaware Mountain formation is at least in part of Permian age. This is shown by the thickening of the salt eastward. To the north, in the Guadalupe Mountains, the beds to the west of the subsurface monocline have been tilted to the east in the Guadalupe Mountain uplift, and those farther north and west have undergone similar deformation in the Sacramento Mountains. These two uplifts are bounded on the west by faults and sharp flexures, and this deformation is thought to be post-Cretaceous in age.

In the Apache and Davis Mountains a long sharp monoclinal flexure and fault forms the northeast face. This can definitely be dated as post-Cretaceous, as beds of that age are involved in the faulting.

The Capitan Reef System

It is now a generally accepted fact that at least some of the limestone highs of the Permian basin are depositional rather than structural. Limestone reefs of great magnitude are found on the surface in the Guadalupe Mountains, the Glass Mountains and the Apache Mountains. The best known of these is that of the Guadalupe Mountains, the reef limestone itself being designated as the Capitan limestone.[1] This reef can be traced in the subsurface through the Getty pool. Stratigraphic conditions in this pool

*Consulting geologist, Midland, Texas. Published by permission of American Association of Petroleum Geologists.

1. E. Russell Lloyd, Capitan Limestone and Associated Formations of Texas and New Mexico. Preprinted from Bull. Amer. Assoc. Pet. Geol., March, 1929.
K. H. Crandall, Permian Stratigraphy of Southeastern New Mexico and Adjacent Portions of West Texas, preprinted from Bull. Amer. Assoc. Pet.. Geol., March, 1929.
W. G. Blanchard, Jr., and Morgan J. Davis, Notes on the Permian Stratigraphy and Structure of Portions of Southeastern New Mexico and Southwestern Texas. Presented at Fort Worth before the Amer. Assoc. Pet. Geol., March, 1929.

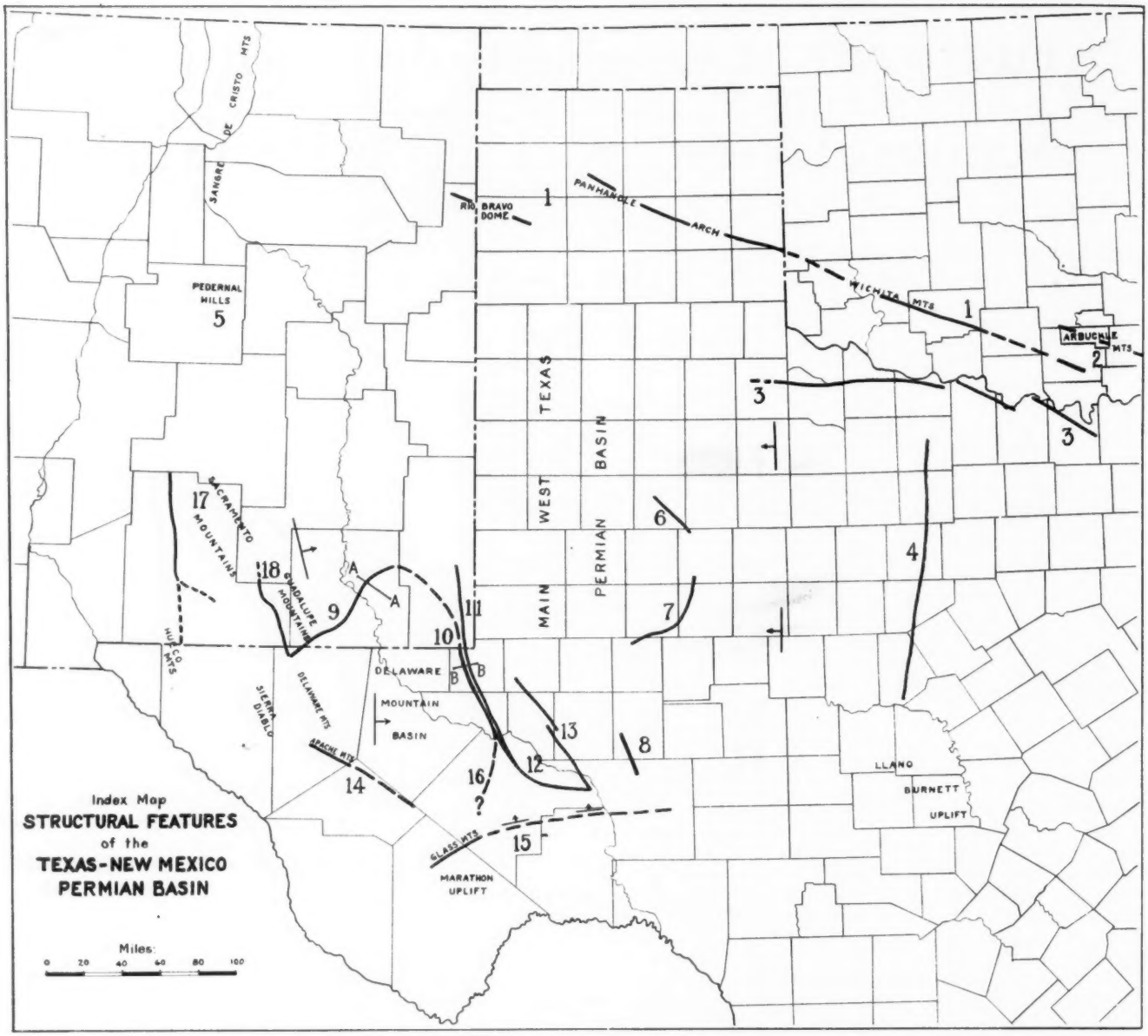

Figure 1—Limestone highs of West Texas and southeast New Mexico and their relation to structural trends in the surrounding regions. 1, *Panhandle arch and Wichita positive element;* 2, *Arbuckle Mountain zone of compression;* 3, *Red River arch;* 4, *Bend arch;* 5, *Pedernal positive element;* 6, *Garza County limestone high;* 7, *Howard and Mitchell County limestone high;* 8, *Big Lake and World-Powell limestone high;* 9, *Capitan reef and the Getty high;* 10, *line of Capitan reef in Lea and Winkler Counties;* 11, *structural high in Lea and Winkler Counties;* 12, *Fort Stockton-Yates limestone high;* 13, *Crane-Upton limestone high;* 14, *Apache Mountain reef and Davis Mountain fault;* 15, *Marathon uplift and southern margin of Permian Big Lime;* 16, *Possible southern extension of Winkler County reef;* 17, *Sacramento Mountain uplift;* 18, *Guadalupe Mountain uplift. The cross sections shown in figures 2 and 3 are indicated at AA and BB*

are duplicated so closely in southeastern Lea county and in Winkler county that there can be little question that the Winkler and Lea county high is a part of the Guadalupian reef system. We can study the reef structure on the surface and by analogy determine how much of the Winkler county structure is due to reef building and how much is due to deformation.

The line of the Capitan reef, though a definite limestone high, must not be confused with the uplift of the Guadalupe Mountains. The former runs northeast. If it is related to any structural feature it was formed on the southeast flank of the Bone Springs-Tank Canyon positive element, but the exact nature of this structure is not known. The Guadalupe Mountain uplift is of the so-called Basin Range type, with a sharp flexure combined with faulting on the west face, and a monoclinal tilting to the east.

The Getty Structure

The Getty pool is shown in cross section in Fig. 2 (Number 9 and line AA, Fig. 1). It shows the characteristics of a normal reef with no deformation except that due to regional tilting and to compaction. It is similar to the structures found to the west on the surface. Structure mapped on the top of the lime shows an asymmetrical cross section and a very steep dip on the seaward (southeast) side.

The structure is rather flat on top and has a comparatively gentle northwest dip. To the northwest the limestone of the upper part of the reef grades into or interfingers with gypsum, anhydrite and red beds. The limestone of the lower part of the reef grades into the San Andres limestone. Points taken on the top of the first limestone encountered, therefore, show a drop to the northwest as steep as that to the southeast but this is not a true dip. It is merely due to the graduation of the upper limestone into the anhydrite series.

Above the limestone the beds thin over the crest of the structure, being thinnest over the highest point in the lime. They reflect the structure in the limestone, however, and the axis in the Rustler at the top of the Per-

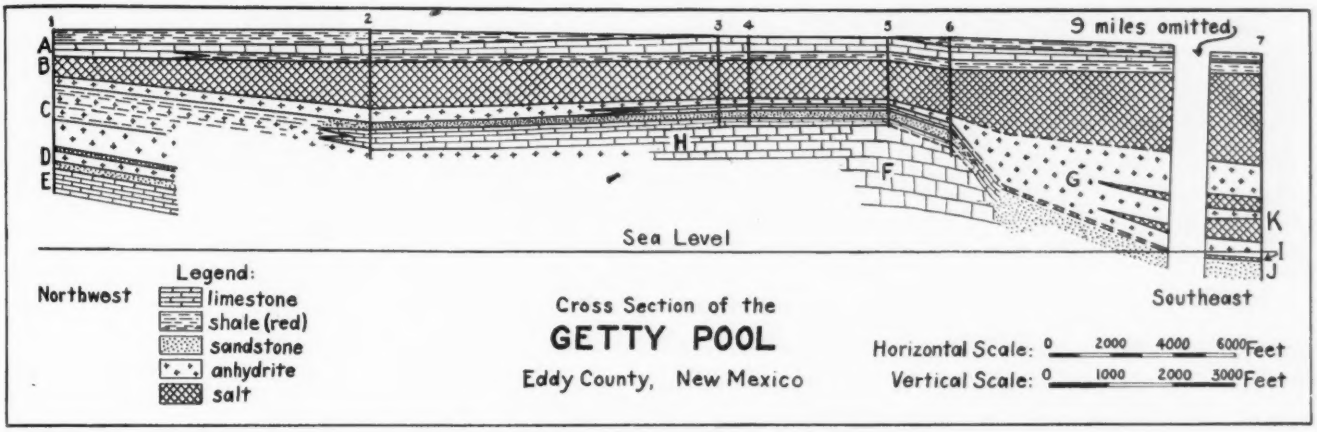

Figure 2—Cross section of the Getty pool, Eddy County, New Mexico, a typical depositional high overlain by a compaction fold. A, Rustler dolomite; B, Main salt series; C, Seven Rivers gypsum and red shale; D, Queen sand series in the lower Seven Rivers; E, San Andres limestone; F, depositional high of the Capitan reef limestone; G, Castile gypsum; H, Carlsbad limestone, lagoonal facies of the Capitan; I, Upper dark limestone of the Delaware Mountain formation; J, Delaware Mountain sandstone; K, white salt in the Castile gypsum. Wells shown: 1, *Marland-Hogan, Johnson* 1; 2, *Cook Ironsides, Dooley* 1; 3, *Getty, Dooley* 1; 4, *Getty, Hinckle* 1; 5, *Getty, Nicholas* 1; 6, *Snowden-McSweeney, Lawrence* 1; 7, *Marland, Workman* 1

mian series is directly over the axis in the lime. This feature may be accounted for entirely by differential deposition and compaction over the topographic elevation of the reef without recourse to folding.

The Getty structure is apparently a plunging one, but the plunge corresponds to the regional dip of the San Andres and Carlsbad limestones on the surface. This dip is due in part to the sinking of the basin to the east, into which the high runs at an angle, and in part to the post-Permian tilting of the Guadalupe Mountain block.

The Winkler County Structure

There are at least three distinct fields producing from the lime in Winkler county. They have somewhat different characteristics but the largest one, the Hendricks pool, shows the same features throughout its length. It differs from the Getty structure, as it is a combination of a depositional high and an anticline due to deformation. (Fig. 3, and numbers 10 and 11 Fig. 1).

This high shows an asymmetrical cross section similar to that of the Getty pool. The lime, however, does not continue to drop off on the seaward side (in this case to the west) but the top flattens out and it is probable that the reef face is well to the west of the producing arch. As in the case of the Getty pool the beds above the lime thin over the structure but they are thinnest over the western part of the limestone high two miles or more west of the axis.

The salt series grades laterally from both sides of the high into anhydrite and the greatest percentage of anhydrite is found where the series is thinnest. Fig. 3 illustrates how the reef was formed and the beds deposited over it, giving the thinnest section over the reef itself. The whole series was then subjected to deformation which produced the Hendricks fold and moved the axis of the limestone high to the east. The thickening of the salt section to the east accounts for the fact that the present axis of the structure in the salt is far to the east of the axis in the lime.

The age of deformation appears to be post-Triassic, as the base of the Triassic sands follows the Rustler down into the syncline west of the field. This may be one case in which movement of Cretaceous or later age has modified Permian structure near the center of the basin.

The original structure of the Hendricks pool was probably broader than that of the Getty pool. Farther to the north in the Lock and Scarborough areas the depositional high and the structural high can still be distinguished but the former is narrower and the compaction fold in the salt above the reef still shows reversal to the east in spite of the fact that the whole lies on the west flank of the deformational fold.

Still farther north the line of the reef diverges from the line of deformation. The former runs northwest whereas the true fold continues to the north. This throws the reef down so far on the west flank that it is unlikely to produce oil.

Porosity in the Lea-Winkler County Area

There is a definite connection between the reef barriers and porosity. Russell Lloyd[2] has pointed out how porosity is formed in the reef itself by dolomitization of the original calcite of the reef. As the sediments grade toward more saline conditions on the shoreward side of the barrier the secondary dolomite grades into primary dolomite and this in turn into anhydrite. Porosity likewise decreases to the eastward until it disappears entirely in the anhydrite. In the Winkler county field the reef probably lies about three miles to the west of production. The porosity diminishes eastward across the field, the steep west flank fortunately being located far enough west to be within the zone of high porosity. Fig. 3 shows that there is not sufficient structural closure to account for the accumulation of oil down to nearly three hundred feet below sea level (the water level in the field). Eastward gradation into anhydrite gives the closure in that direction.

In southern Lea County, as the reef diverges from the structural high porosity conditions on the latter become poorer. Porosity in the lime itself is probably so poor on the axis that monoclinal accumulation to the west may be found due entirely to decrease of porosity up dip. Wells from such accumulations cannot be expected to compare with the large wells found in or near the reef limestone itself. The Marland Lockhart and the Empire No. 1 State are examples of the former.

The Depositional Theory Applied to Other Limestone Highs

In the foregoing account certain features are suggested as indicating depositional highs while others indicate deformational highs.

Thinning of the salt and red bed section over lime structure is taken to favor the former. Such thinning can best be explained as due to actual differential deposition and differential compaction over a topographic elevation[3] although the same result can be obtained by a growing anticline or by the sinking of basins around a stationary high. The Panhandle arch is an example of the latter.

Where there is evidence that a high

[2]E. Russell Lloyd, op. cit.

[3]Nevin, C. M., and Sherrill, R. E., Studies in Differential Compaction. Bulletin A. A. P. G., Vol. 13, pp. 1-23, 1929.

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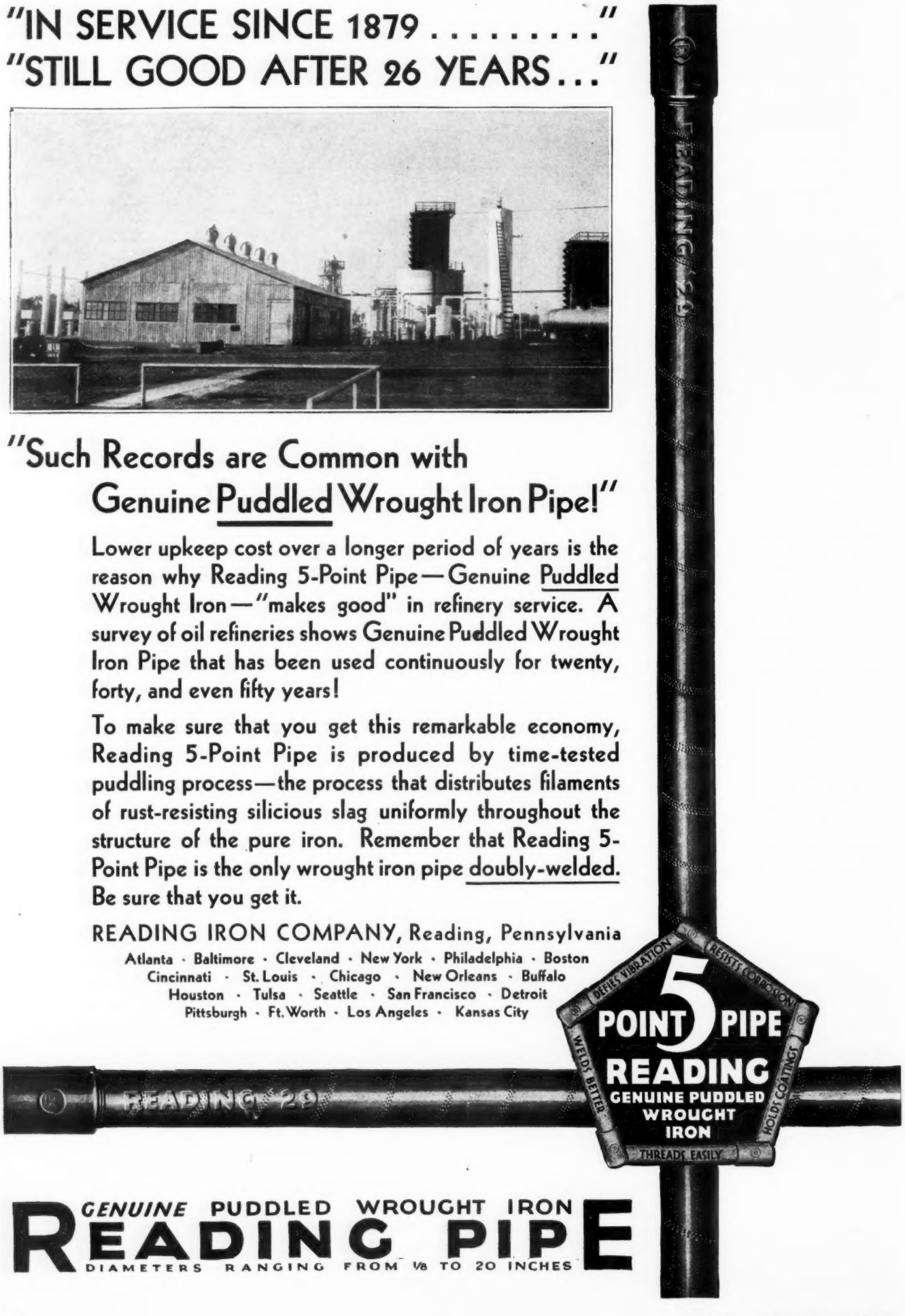

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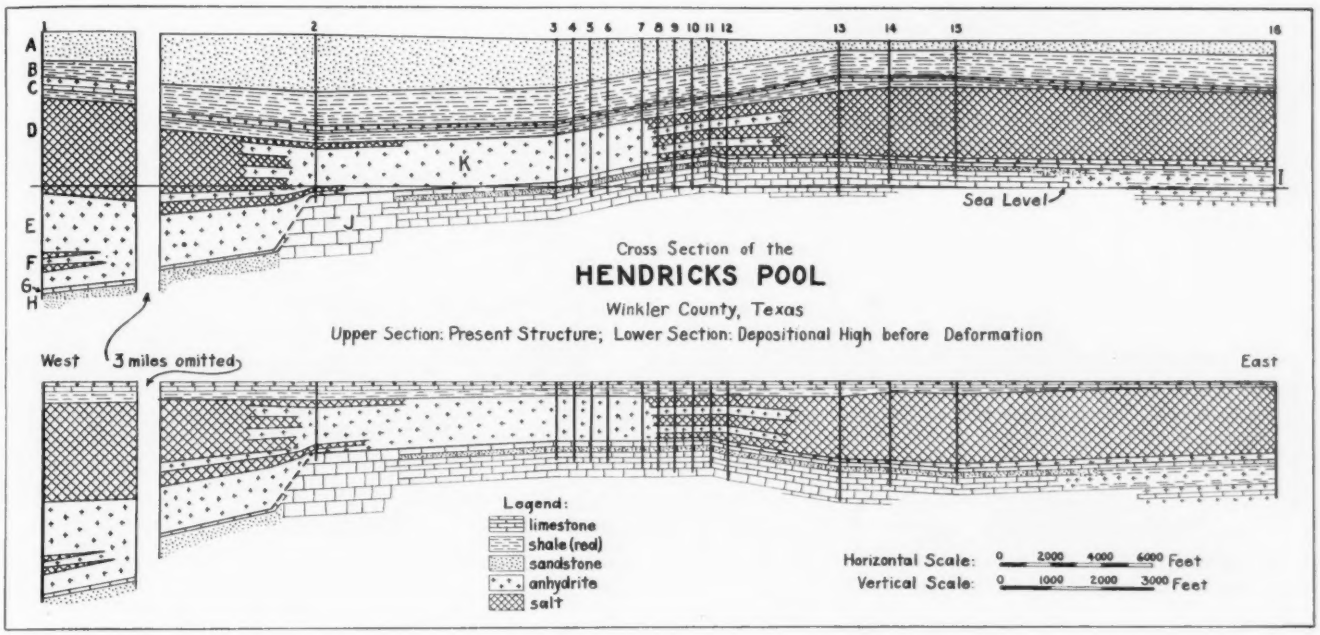


Figure 3—Cross sections of the Hendricks pool, showing a high due to a combination of deposition and deformation. The upper section represents the present structure; the lower represents the structure as it was before the formation of the syncline west of the pool. This was reconstructed by assuming that the Rustler dolomite was laid down horizontally. It is probable that there was a slight compaction fold in the salt and Rustler formed during and shortly after deposition. This would accentuate the depositional high. A, Triassic and Recent sandstone and shale; B, Permian red beds; C, Rustler series; D, Main salt series; E, Castile gypsum; F, White salt in the Castile; G, Upper dark limestone of the Delaware Mountain formation; H, Delaware Mountain sandstone; I, anhydrite series east of the high; J, depositional high of the Capitan reef limestone; K, anhydrite replacing salt over the depositional high. Wells shown: 1, *Skelly, Leeman* 1; 2, *Humble, Hendricks* 1; 3 *to* 12, *wells in the Hendricks pool;* 13 *and* 14, *Independent, McCabe* 1 *and* 3; 15, *Amerada, Walton* 1; 16, *Bolin, Brown and Altman* 1

is partly depositional, the correspondence of the axis of the structure in the overlying beds with that in the lime is considered as evidence in favor of its being entirely due to deposition, as it seems unlikely that the depositional high would be located directly over the axis of deformation. It is thought that in such cases as the Getty pool the original location of the reef was influenced by some structural feature, possibly a terrace on the edge of the basin which was sinking to the east.

In Winkler County the area east of the reef may be a positive element which originally located the reef, and later influenced the development of the deformational structure. However such influence may be regarded as secondary when compared with the magnitude of the known depositional highs.

An asymmetrical cross section likewise suggests but does not prove that a high is depositional.

Graduation of the lime section in the direction of the lesser dip strongly suggests deposition rather than deformation though it is possible for an anticline to form a barrier and cause a graduation toward saline conditions behind it.

Localized porosity is perhaps the best evidence of a depositional high. In the San Andres limestone in the Maljamar and Artesia districts porous horizons can be traced both on and off structure over wide areas. This is in marked contrast to the porosity conditions described in the Winkler County field. The Artesia and Maljamar pools, especially the latter, are characterized by a fairly uniform section above the limestone.

The horizontal plan of the structures is a poor index of their origin, as both deformational structures and reefs may be long and narrow or short, broad and echeloned.

Let us apply some of these criteria to two other limestone highs of West Texas.

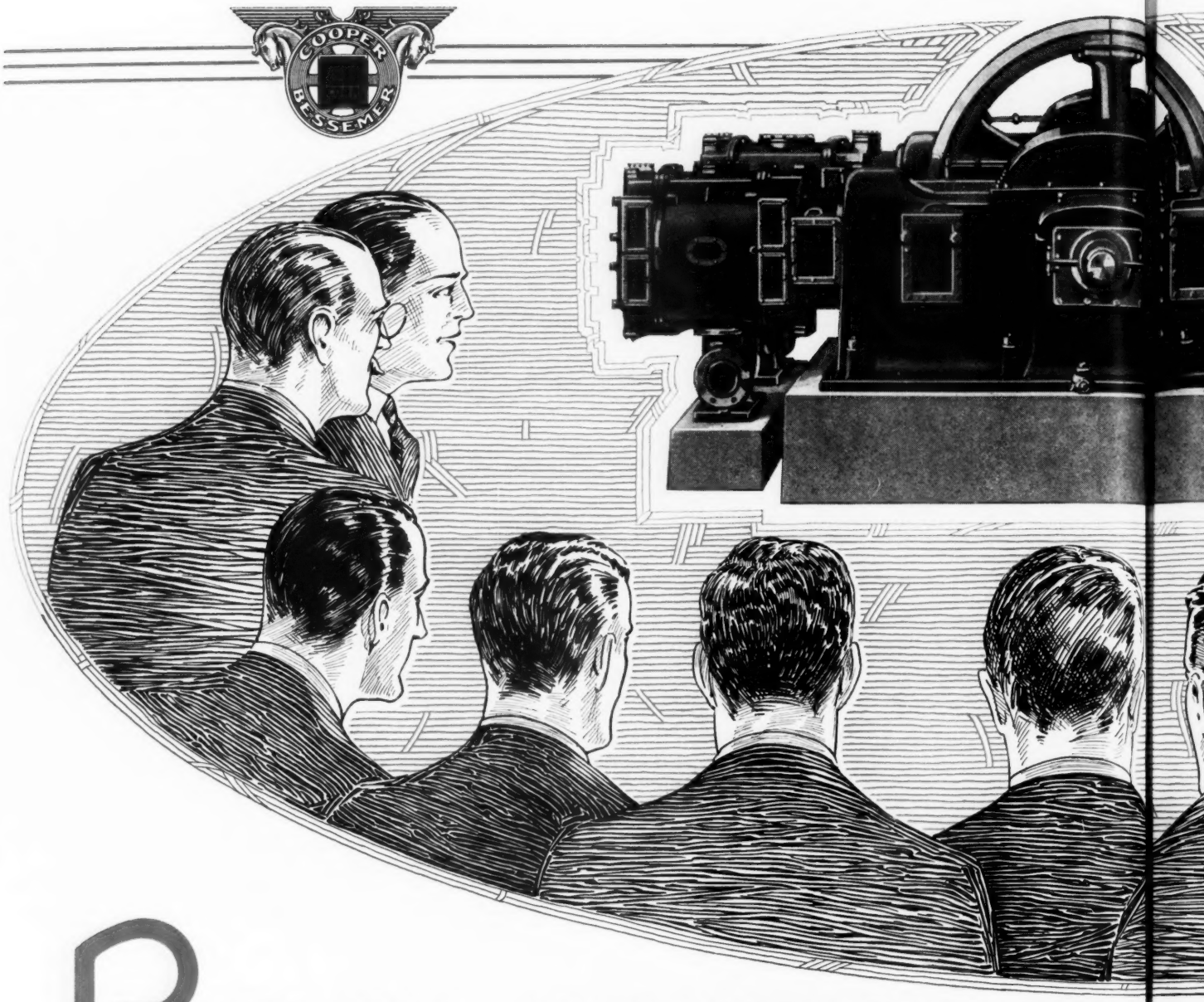
The Yates high shows unusually high porosity. The beds above the lime thin over the structure, the axis in the upper beds corresponding to that in the lime. The structure is asymmetrical and is somewhat irregular in plan. Though the writer has traced no gradation in the lime series from the Yates pool itself, farther to the west the top of lime appears to grade into anhydrite northeast of the Fort Stockton high. This gradation is similar to that east of the Winkler County high. It is probable that the Fort Stockton high swings eastward into the Yates pool. All of these features suggest a depositional high of reef origin and no deformation is necessary to explain any of the structural features.

The Big Lake high is more symmetrical than those already discussed. The porous oolitic horizon from which production is found is continuous both on and off structure. The lime section does not appear to be thicker under the structure than on either side. The structure is rather short and broad for a deformational structure but is not unlike the closed domes produced by horizontal displacement and resulting shearing. If any of the limestone highs in the basin are due to deformation this is probably one of them. Additional evidence of this is found in the deep well of the Texon which is producing from sand far below the Permian, indicating that the lower beds are folded on the same axis as that of the limestone high.

Other limestone highs, notably the Howard and Mitchell County high and the Crane and Upton County high, show features of depositional highs, but are located behind the Guadalupian barriers, where the waters were too saline for coral growth. They do not show the extreme porosity conditions of the line of the reefs, and it is thought that they may be due to abnormal deposition of limestone or dolomite along lines of currents or at the mouths of fresh water streams. Each case, however, must be considered on its own merits.

Relation of Depositional Highs to Deformational Highs

Reefs and other forms of depositional barriers are controlled by the depth of the water which in turn governs the location of coral growth and controls currents. The Lea-Winkler Country barrier apparently lies on the west flank of a major positive ele-



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ment, as shown by the deformational fold which can be distinguished from the depositional high.

The remarkably uniform dip on the west flank of the Delaware Mountain basin is an argument against the presence of any folding due to horizontal compression so that it seems likely that the only deformational forces have been those of vertical uplift and of sinking basins. Exceptions to this statement, of course, include such deformation as the block faulting produced long after Permian time in the Sacramento and Guadalupe Mountains, and the uplift of the Glass Mountains which lies along an old line of folding and does not parallel any of the trends in the basin near it.

Structure Below The Big Lime

Little is known concerning the structure of the beds below the Big Lime in West Texas and southeast New Mexico. The ultimate solution of the problem of the limestone high is to be found in the structure of these underlying beds. Where the limestone maintains its thickness both on and off a high, especially in the basin beyond the steep flank, the high may be regarded as due to deformation. The limestone may maintain its thickness on the gentler dip and yet the high may still be depositional. A greater thickness of limestone on the high than in the basin beyond it is conclusive evidence of its depositional origin.

In considering evidence of this nature possible gradations of the beds below the upper part of the lime must be considered. For instance it is likely that the upper part of the shale series which underlies the rather thin limestone section in Crockett County grades northward into limestone in the McCamey district in Upton County. The fact that 3000 feet of limestone has been drilled in the McCamey field is, therefore, not conclusive evidence that the McCamey high is depositional. A similar example on the surface is the gradation of the sandstone and shale beds of the Word northeast into limestone in the Glass Mountains.

Conclusions

The limestone highs of the Permian basin may be due almost entirely either to deposition or to deformation, or they may be the result of a combination of the two. Where the high is asymmetrical and the fold in the beds above the lime corresponds to the lime structure, as in the Getty pool, deposition is the controlling factor. The Big Lake high shows characteristics of a deformational high. In the Winkler County high a careful study shows the relative importance of deformation and deposition where the two have combined in forming the structure.

The ultimate solution in doubtful cases lies in deep drilling, to determine the structure of the beds below the lime.

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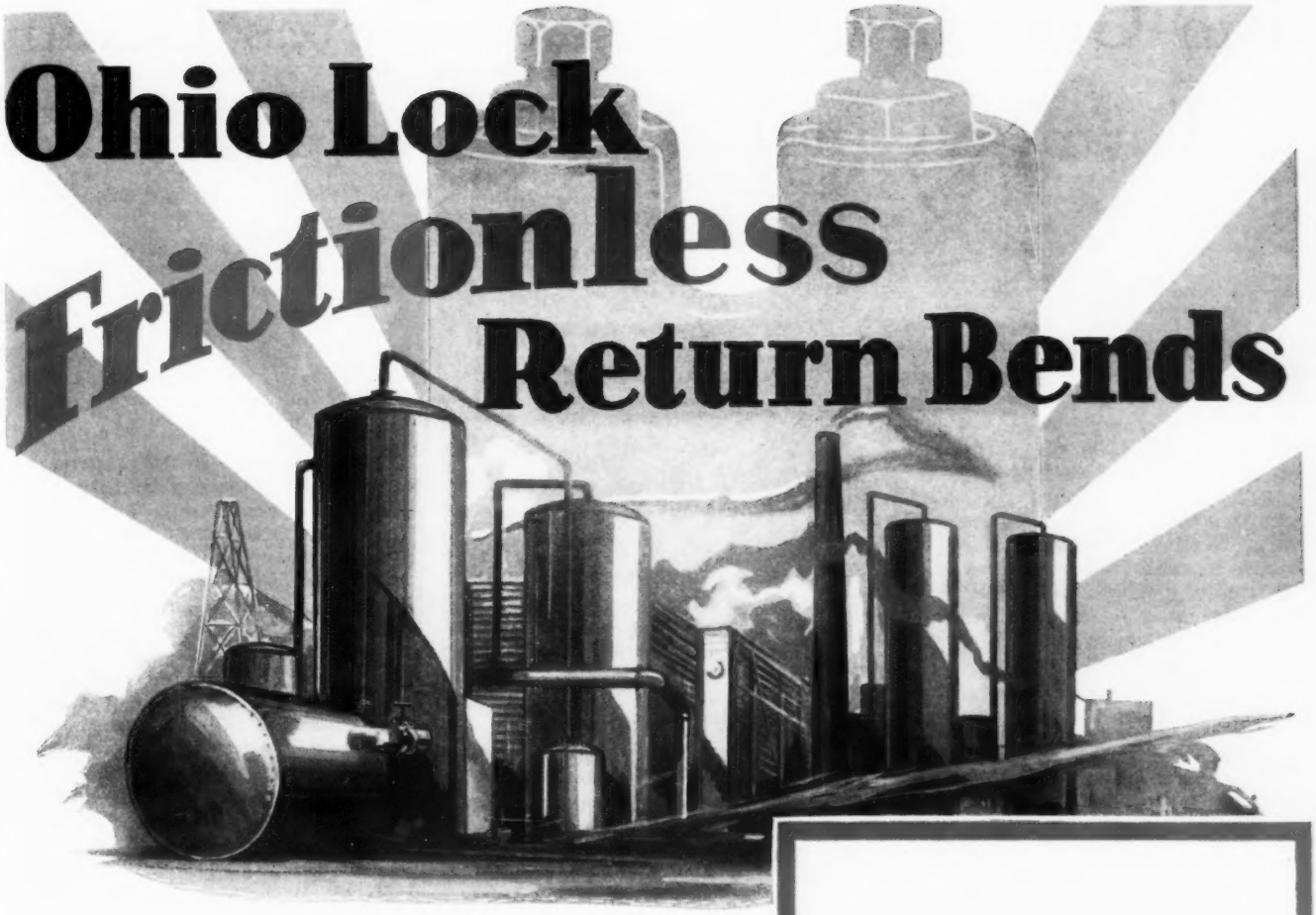

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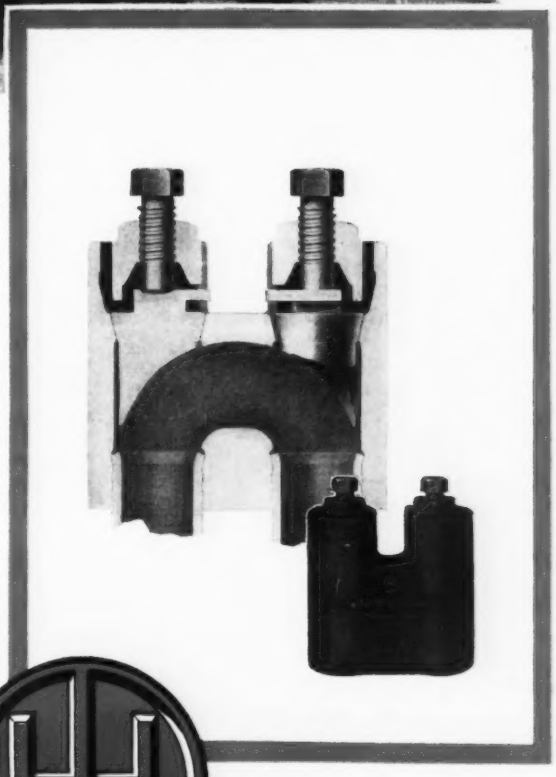

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N. P. N. STAFF WRITER

LOS ANGELES

PREPARATIONS are now under way to unload the first tanker at one of the latest and most modern oil loading terminals in the world. This $2,000,000 oil depot, located at Los Angeles harbor on property of the Rio Grande Oil Co., has many notable features. In oil handling facilities, fire prevention equipment, accessibility to sources of supply and to markets, and in its methods for economical operation it represents important advances in this branch of the industry.

Some conception of the efficiency of the plant and the forethought that has gone into its design and construction may be gained from the fact that a tanker can tie up within ten or fifteen minutes after arriving alongside the wharf and can be loaded or unloaded in a few hours with the aid of only two terminal men. The ship's cargo is silently pumped to or from the compartments when these men make the proper connections, press a series of buttons, and gauge the flow.

This terminal lies at one of the strategic oil shipping points of the Los Angeles harbor. The harbors of San Pedro (Los Angeles) and Long Beach form part of a long crescent, facing south into the Pacific Ocean. The Rio Grande terminal lies a few hundred feet east of the technical dividing line for the two harbors, at a point where channel No. 2 of the Long Beach harbor touches the mainland.

This position affords complete transportation facilities, for it gives the terminal a railroad siding on the land side and it can be reached by boat either through the San Pedro harbor or through the open waterway lying beyond Long Beach.

One of the primary advantages of the new terminal to the Rio Grande Co. is that it enables crude oil from the Elwood field, which recently suffered a cut in price, to be transported direct to the company's refinery, which lies 22 miles directly north of the terminal at Vinvale, California, and to which it is connected by pipe lines.

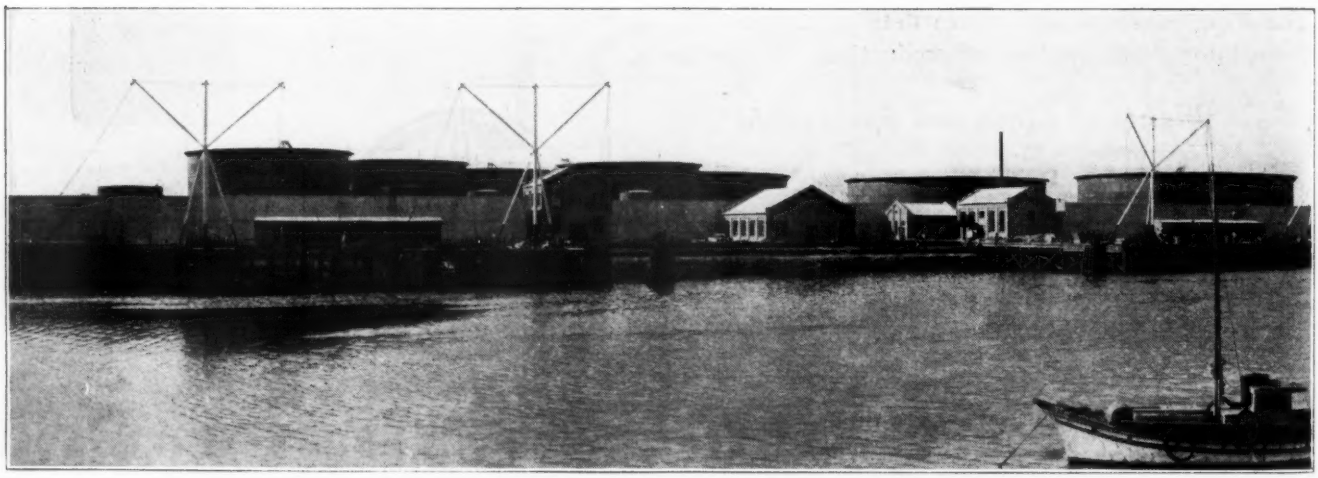
To prevent the possibility of damage from a break in any of the storage tanks at the terminal, a 20-foot retaining wall has been erected around the entire tank farm. The wall is of concrete 14 inches thick at the bottom and 12 inches thick at the top, with a 12-foot base and supports to reinforce it. Because of the unstable condition of the ground, the tanks rest on rings of concrete, two feet thick and eight feet wide, which, in turn rest on three rings of piling driven 40 feet into the ground.

The 12 tanks inside the retaining wall represent a storage capacity of 500,000 barrels. They include three large tanks that are 144 feet in diameter and that stand 40 feet high, with a capacity of 118,000 barrels each. Four other tanks have a capacity of 35,000 barrels each. In addition there are two 3000-barrel and three 1060-barrel tanks for lubricating oils and other petroleum products. To provide for future needs, space has been left for two of the large tanks or four of the smaller size.

At the entrance to the property, and outside the retaining wall that surrounds the tanks, is a high-pressure pumping system that in from 24 to 30 hours can unload a 60,000-barrel tanker and force the oil through the pipe line to the refinery at Vinvale, 22 miles north. This quick movement is made possible by the high volatility of the crude oil. About 34 hours is required to pump fuel oil back from the refinery to the marine terminal, notwithstanding the fact that the fuel oil is heated to about 150 F. at the refinery and its movement is helped by two booster plants on company property at Signal Hill. By the time the fuel oil reaches the terminal its temperature is down to about 80 or 90 degrees.

Three pipe lines, representing about $500,000 investment, connect with the high-pressure pumping system. One line is for crude going out and two for refined products coming in. There are, in addition, feed lines running to each of the 12 tanks on the farm, as all fuel oil passes through the storage system for gauging.

A low-pressure pumping system, located near the fire wall, draws oil and gasoline from the tanks to the tankers, or reverses the process. On one side of the pump house are six pumps for handling the lighter prod-



View from harbor of new Rio Grande terminal which was completed Aug. 1

ucts, and on the other side are two centrifugal pumps for handling heavy oil. Each of the eight pumps is actuated by a 250-horsepower motor, but each motor can be switched to any one of the other pumps.

The two heavy oil pumps handle about 8000 barrels per hour each, and when coupled together move about 22,000 barrels per hour. Two 14-inch gasoline pumps, with their 250-horsepower motors, can singly make 6000 barrels per hour, or together make about 20,000 barrels. Pumps also are provided for kerosene, diesel oil, and other products required to refuel tankers or small harbor boats.

The company's wharves are equipped with efficient manifold systems that permit the various products to be carried direct into the holds of the vessels. If a tanker has facilities for taking on six lines at a time, the oil can be directed from the pumphouse through the fuel line to each of the three manifolds on the large wharf and into the oil compartments by six lines, two flexible tubings being attached to each of the oil lines where they reach the wharf manifold. The same system applies to all other products, each of which has a separate line running under the roadway to the wharves, so that the terminal represents a maze of pipes and valves.

In compliance with government regulations, a tanker must unload oil by its own pumping equipment. A 90,000-barrel load takes about 18 to 20 hours. About five hours would be required to reload the tanker with fuel oil, although much more rapid time could be made if the tanker could permit two 14-inch pumps to work together at the rate of 22,000 barrels per hour.

The two 14-inch gasoline pumps are capable of loading 800,000 gallons per hour, but because gasoline vaporizes so rapidly, a much longer time is taken, so that the vapors may pass out through the vents of the tanker compartments and thus remove the danger of explosion.

Every device and every facility for the prevention and suppression of fire at the plant is installed. The fire chief and the fire prevention engineer of the city of Long Beach have had considerable experience in fighting oil fires. Under their direct supervision a special fire pump has been installed at the plant. Two large motors; one electric and one gasoline, are arranged in tandem. The failure of one automatically throws the other into operation. These pumps can place 2000 gallons of water a minute, at 180 pounds pressure, at any one or at all of the 37 outlets spotted about the terminal. At strategic points on the terminal property portable foamite generating units are located.

A fuel loading barge for supplying small harbor craft is connected to the terminal at one end. It distributes fuel oil, gasoline, diesel engine oil, kerosene, and other products. A wholesale loading rack is to be located near the entrance. Lubricating oils and other products not handled by the pipe lines will be received at the railroad siding adjoining the plant.

Marine officials of southern California regard this terminal as a valuable addition to the marketing facilities of the Los Angeles harbor district. Although a considerable portion of the traffic handled at the plant will be oil coming from the company's property at Elwood, marketing experts are quick to recognize the value of such a terminal in the growing traffic that is being developed with Europe, South America, and Asia.

New Patents

Prepared by R. E. Burnham, patent and trademark attorney, Continental Trust Building, Washington, D. C., from whom copies may be obtained at the rate of 20c each. State number of patent and name of inventor when ordering.

July 30, 1929

PRODUCTION

Apparatus for exhausting wells. Charles A. Anderson, Oakland, Cal. Filed Nov. 25, 1925. No. 1,722,552.

Pressure method of working oil sands. Leo Ranney, New York, N. Y., assignor to Standard Oil Development Co. Filed May 11, 1927. No. 1,722,679.

REFINING

Process for dewaxing oils. Leslie W. Naylor, Florence, Colo., assignor to Continental Oil Co., Denver, Colo. Filed June 7, 1927. No. 1,722,307.

Continuous rectification of liquids at high-boiling point. Emile A. Barbet, Paris, France. Filed June 11, 1923. No. 1,722,322

Process of recovering terpene products from gasoline-terpene mixtures. Ebenezer E. Reid, Baltimore, Md., assignor to Hercules Powder Co., Wilmington, Del. Filed Aug. 9, 1927. No. 1,722,765.

MISCELLANEOUS

Liquid-dispensing apparatus. John B. Davis, Springfield, Mass., assignor to Gilbert & Barker Mfg. Co., same place. Filed July 14, 1927. No. 1,722,694.

Measuring and dispensing apparatus. William D. Bell, Minneapolis, Minn. Filed June 25, 1926. No. 1,722,835.

Process of separating oil from coal tar. Anton Weindel, Essen-Ruhr, Germany. Filed Dec. 12, 1924. No. 1,722,872.

Fluid-distributing apparatus. Elmer M. Kling, Brighton, Mass., assignor to Moore & King, Inc., Boston, Mass. Filed April 10, 1928. No. 1,722,985.

PRODUCTION

Sucker-rod elevator. Edward E. Stevenson, Los Angeles, Cal., assignor to Emsco Derrick & Equipment Co., same place. Filed Feb. 8, 1926. No. 1,722,533.

Oil-field jack. Fred W. Stork, Saginaw, Mich., assignor to Stork Engineering Co., same place. Filed June 4, 1927. No. 1,721,718.

Tubing oil saver. Erd V. Crowell, Los Angeles, Cal., assignor of one-half to Gulberson Corporation, Dallas, Tex. Filed Feb. 11, 1924. No. 1,721,806.

Pump. Charles W. Lipe, San Jose, Cal. Filed Nov. 19, 1927. No. 1,721,825.

Fishing-tool. Ralph I. Henderson, Charleston, W. Va. Filed June 14, 1928. No. 1,721,880.

Fishing-tool. Ralph I. Henderson, Charleston, W. Va. Filed Nov. 17, 1928. No. 1,721,881.

Oil-well regulator. Malva M. Robertson, Kansas City, Mo. Filed July 20, 1925. No. 1,721,884.

Core drill. John T. Phipps and Herman C. Smith, Whittier, Cal.; said Phipps assignor to said Smith. Filed Nov. 17, 1924. No. 1,721,921.

Tubing-hanger. John D. Lemex, Tulsa, Okla. assignor to Oil Well Supply Co., Pittsburgh, Pa. Filed Nov. 6, 1926. No. 1,722,053.

Oil-well packer. Patrick H. Mack, Bradford, Pa., assignor to Oil Well Supply Co., Pittsburgh, Pa. Filed Feb. 1, 1927. No. 1,722,102.

MISCELLANEOUS

Gasoline-dispensing device. Thomas M. Manson, Toronto, Ontario, assignor to Clear Vision Pump Co., same place. Filed Dec. 6, 1924. No. 1,721,632.

Process of producing lubricating oil from petroleum oil. John B. Terry and Ralph A. Halloran, Berkeley, Cal., assignors to Standard Oil Co. of California.

Belt-dressing and process of making. Arman E. Becker, Elizabeth, N. J., assignor to Standard Oil Development Co. Filed June 25, 1925. No. 1,721,762.

Apparatus for extracting liquid hydrocarbons from oil shale. August Schilling, San Francisco, Richard Sachse and Dimitri Liamin, Los Angeles, and Theofiel Callaert, San Francisco, Cal. Filed Nov. 23, 1926. No. 1,721,836.

Apparatus for flow control. Luis de Flores, Pomfert, Conn., assignor to Texas Co., New York, N. Y. Filed Feb. 10, 1928. No. 1,721,898.

Containing and dispensing organization for motor oils. Harry M. Berry, Oil City, Pa. Filed May 10, 1928. No. 1,721,941.

Automatic water-discharge device for oil-tanks. John H. Smith, Luling, Tex. Filed Feb. 26, 1927. No. 1,722,160.

Soaking-drum cleaner. George W. Wheat, Cedar Grove, N. J., assignor to Standard Oil Development Co. Filed Nov. 16, 1927. No. 1,722,188.

Dispensing apparatus (for gasoline). Grover C. & Gilbert E. Chamness and Robert L. Kane, Herrin, and Henry M. Keith, West Frankfort, Ill. Field Oct. 11, 1926. No. 1,722,199.

Foreign Opportunities

Reserved information may be obtained from the Bureau of Foreign and Domestic Commerce, Washington, and its district and cooperative offices by duly registered firms and individuals upon written requests by opportunity number. The Bureau does not furnish credit ratings or assume responsibility as to the standing of foreign inquirers; the usual precautions should be taken in all cases, and where no references are offered it does not necessarily imply that satisfactory references could not be given. Correspondence may be in English unless otherwise stated.

39845.—**Paraffin wax**, Cali, Colombia, agency.

39846.—**Gasoline**, Marsa, Maltese Islands, agency.

39847.—**Paraffin wax**, Hamburg, Germany, agency.

39848.—**Lubricating oils**, Helsingfors, Finland, agency.

39104.—**Paraffin and match wax**, Taiyuanfu China, agency.

39177.—**Kerosene and petroleum** (unspecified) Djibouti, India, sole agency.

39184.—**Naphtha**, Alexandria, Egypt, purchase and agency.

37399.—**Gasoline and lubricating oils**, Alexandria, Egypt, purchase and agency.

37412.—**Paraffin**, Vienna, Austria, purchase.

37445.—**Paraffin**, Vienna, Austria, purchase.

39599.—**Lubricating oils**, Vienna, Austria, agency.

39604.—**Asphalt, petroleum pitch, and ozokerite**, Hamburg, Germany, agency.

39610.—**Paraffin wax**, Montevideo, Uruguay, agency.

39625.—**Lubricating oils**, Milan, Italy, agency.

39657.—**Lubricating oils**, Tenerife, Canary Islands, agency.

39774.—**Paraffin wax**, London, England, agency.

39444.—**Paraffin wax**, Hamburg, Germany, purchase or agency.

39495.—**Gasoline and kerosene**, Addis Ababa, Ethiopia, purchase.

39989.—**Lubricating oils**, Cairo, Egypt, purchase

39990.—**Automobile oils**, Montreal, Canada, purchase.

39991.—**Gasoline**, Berlin, Germany, agency.

Wilcox Remodels Refinery at Bristow

By Allen S. James
N. P. N. STAFF WRITER

TULSA, Aug. 12

THE H. F. Wilcox Oil & Gas Co. is no longer merely an Independent oil producing company in the Mid-Continent. Within the past several months it has been in the midst of an expansion program. The result is a well rounded organization ready to take its place with other Mid-Continent Independents who produce and refine their own oil, and market their refined products through their own wholesale or retail outlets.

The first evidence of the expansion program was revealed more than a year ago when the company built a service station in Tulsa, around which was grouped a number of garages which it rented by the month. The station was located within four or five blocks of the business center of Tulsa. The success of this station resulted in a second, also advantageously located, being erected, and now the station part of a third has been completed.

The gasoline sold through these stations was bought from Mid-Continent refiners. Company officials decided that since the company had its own crude and had built up a good gasoline gallonage, there was no reason why it should not refine its own gasoline.

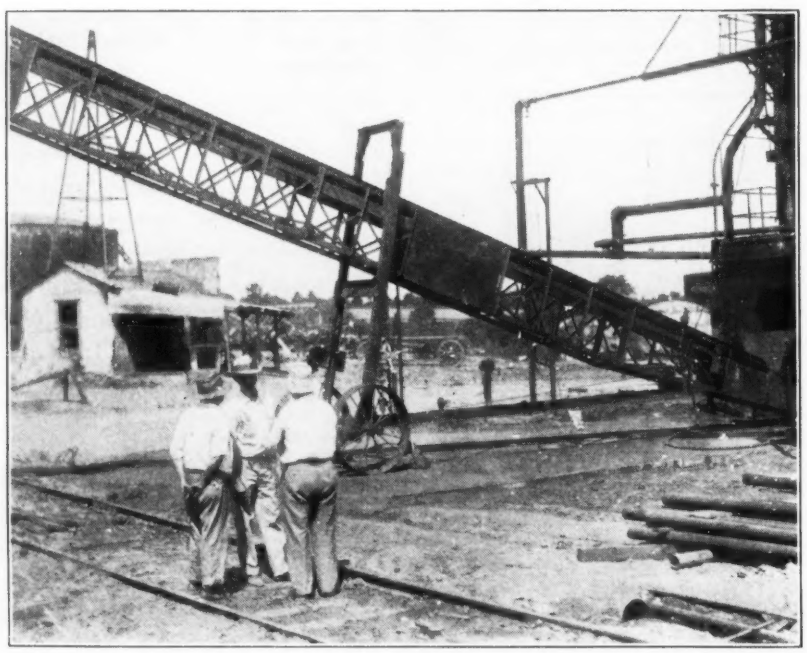
It was then that the refinery construction phase of the expansion program got under way—about the first of January, this year. The program was completed June 4 when a new and modern 5000-barrel skimming and cracking plant at Bristow was put on stream.

Nine years ago the Wilcox company financed the construction of a 1000-barrel skimming plant at Bristow. The plant was constructed primarily for experimental purposes. Later it was leased to the Riley Petroleum Co. which operated it up until the fall of 1928.

When the Wilcox company decided to enter the refining phase of the industry, it was decided first to build a new unit around the plant already at Bristow. Some foundation work was done, but it was later decided to dismantle completely the old plant and build an entirely new unit. The old plant accordingly was cleared off the site and the modern equipment installed. About the only thing left on the site to show where the old plant stood is a water pump house, and even that will be torn down within a short time.

The pipe line for the original plant was too small for the new equipment and the company accordingly laid several other lines to some of its producing properties in order to have sufficient oil.

All that is left of the old plant of the H. F. Wilcox Oil & Gas Co. at Bristow is the small water pump house shown above. A new and modern plant has been built on the site. Even this pump house will be torn down.—N. P. N. staff photo



Coke is no problem at the Wilcox plant. The conveyor shown above takes the coke directly from the reaction chamber and dumps it into cars, with a minimum amount of handling and a vast saving in labor. —N. P. N. staff photo

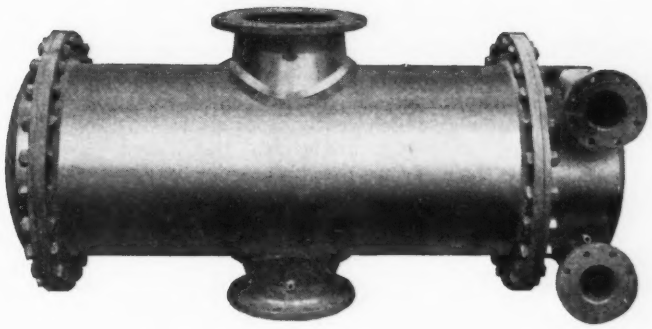
The refining equipment consists of a Winkler-Koch pipe still, two shell stills for reruns and a thousand barrel Dubbs cracking unit. The Winkler-Koch equipment was installed under the supervision of P. I. Tinkler, refinery superintendent for the Wilcox company. In the furnace construction the firing was provided for from each side instead of from the front as in some of the other furnaces of similar construction.

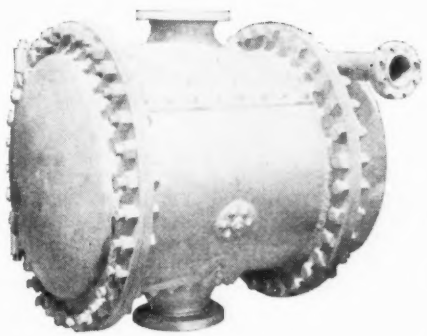
The vapors are taken from the furnace into a large refractionating tower. The gasoline cut is taken off overhead. About mid-way of the tower is a blank deck and from this section a kerosene cut is taken off into a small tower. The fuel oil and residuum is taken off into a third tower and by means of a liquid level control a pump keeps the oil flowing into the raw oil tanks for the Dubbs unit.

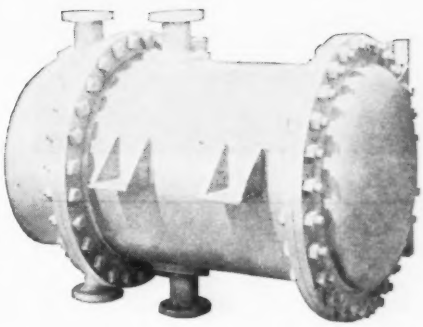
The Winkler-Koch unit has been yielding approximately 35 per cent gasoline from a 35 gravity Mid-Continent crude. The fires were started June 4 and the unit has been in continuous operation since that time.

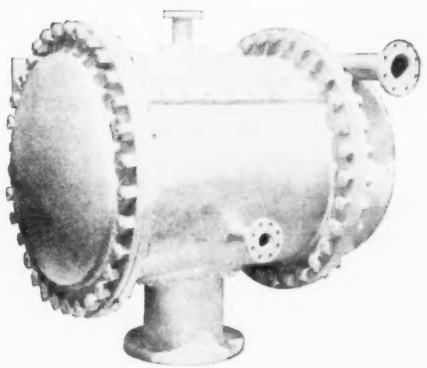
Reflux Condensers

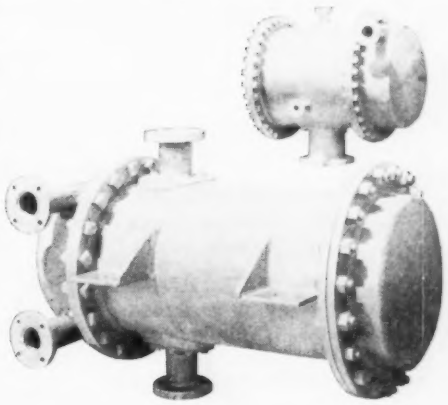
TULSA TYPE











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NATIONAL PETROLEUM NEWS
700 Penton Bldg.
Cleveland, Ohio

The Dubbs unit was installed under the direction of Universal Oil Products Co. engineers. The reaction chamber and dephlegmator are of the standard design for that size unit, the former being 10 x 40 feet high and the latter 80 feet high.

The furnace is the first of its kind to be installed in the Mid-Continent. A similar furnace was installed some time ago at a refinery in Illinois but some changes over that design were made in the furnace at the Wilcox plant.

The furnace is an Alcorn radiant heat furnace, made by the Alcorn Construction Co. of Philadelphia, and modified by the engineers of the Universal Oil Products Co. The flames do not come in contact with the tubes at any time. There are eight firing channels which extend back to the flue, at right angles to the tubes. The heat from the flames is carried first by radiation to a set of tubes just above the channels. The heat passing along the channels enters a checkered flue at the rear of the furnace and then passes around another tier of tubes before passing out the chimney.

Between June 4 and July 19, 11 runs had been made with the Dubbs unit. The unit was operated two days and down one day, giving a cycle every 72 hours. Several minor details have to be worked out on the furnace due to its new design and engineers for both the Dubbs and Alcorn companies have been on the ground superintending these changes.

Superintendent Tinkler said a temperature of approximately 1500 degrees F. was maintained in the furnace and the oil was run through under a pressure of 190 to 200 pounds per square inch. The yield, Mr. Tinkler said, was approximately 72 per cent pressure distillate. One of the chief troubles encountered in the first runs was failure of the furnace to cool rapidly enough, Mr. Tinkler said, but at the time the writer visited the plant some changes in the tubes were being made which it was believed would eliminate that trouble.

The products made at the plant are U. S. Motor gasoline, a cracked gasoline high in anti-knock value, kerosene, a 38-40 furnace oil with a flash of 150 degrees F., a 28-30 fuel oil under 200 flash, and coke.

The coke problem which has worried many refiners has been entirely eliminated at the Wilcox plant. A large industrial company in Oklahoma for three or four years has burned coke in preference to coal, and when the Wilcox company decided to install the Dubbs unit the sales department arranged with this industrial company to take all the coke manufactured. With the assurance that the coke would not pile up in the refinery yard, Mr. Tinkler sought a method of handling it with a minimum of cost in labor and time.

A spur track was built along side the reaction chamber from the Frisco railroad, which runs right by the refinery yard. A conveyor mounted on wheels, with a hopper large enough to fit under the reaction chamber, and operated by an electric motor built onto the framework, was constructed by a Chicago company.

When the reaction chamber is to be cleaned out, the bottom head is dropped and the cable, which is a ⅞-inch, 4300-foot wire core line, is hooked on to a steam hoist. As the cable is wound on the hoist the coke falls into the hopper placed under the chamber's opening. The delivery end of the conveyor extends up over a coal car. It is only a matter of pulling the cable. As the coke drops into the hopper it is conveyed directly to the coal car. There is no other handling. In this way the coke is loaded free from all dirt or foreign objects such as bolts, nuts or wires which have been found in coke which had been taken first from chambers, dumped in the coke yard and then reloaded into cars.

Officials of the company estimate that the conveyor has cut down the coke handling cost almost a dollar a ton. Since the market price for coke in Oklahoma is listed around $1.50 to $2.00 a ton, this savings in cost affects a real economy for the company.

Island Home for These Oil Men

CLEVELAND, Aug. 10.—One of the famed 30,000 islands in Georgian Bay, Canada's well known beauty spot, has just been bought by Edmund Walton, president, and Burt Zimmerman, manager and vice president, respectively of The Columbia Refining Co., here; Ed Killeen, president of the Terminal Garage Co., a Van Sweringen enterprise, George Read, Cleveland manager of the Calumet Refining Co., Chicago, and George Monahan.

The island is equipped with a large lodge having eight sleeping rooms, seven boats, a bathing beach, keeper's house, an Indian guide, etc.

It will be used by these men and their friends as fishing headquarters during the summer and for deer hunting in the fall, according to Mr. Zimmerman. They expect to find small-mouth bass in the summer and lake trout in the fall.

There are more than 600 manufacturers of oil burners in this country now, about one-sixth of whom are listed by Underwriters Laboratories. The Oil Heating Institute estimates that the large majority of the oil burner sales are made by about 50 of the companies listed by the Laboratories, according to the American Petroleum Institute.

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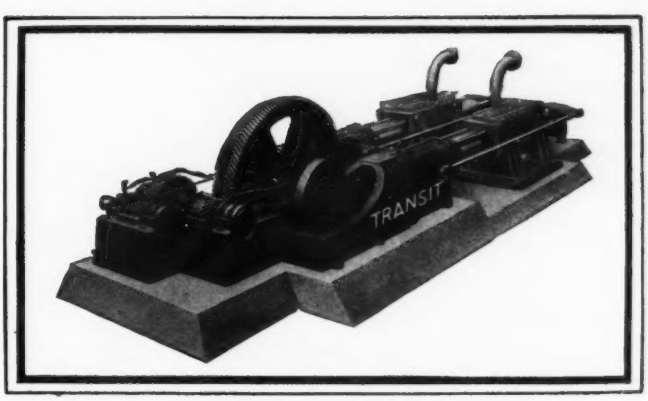

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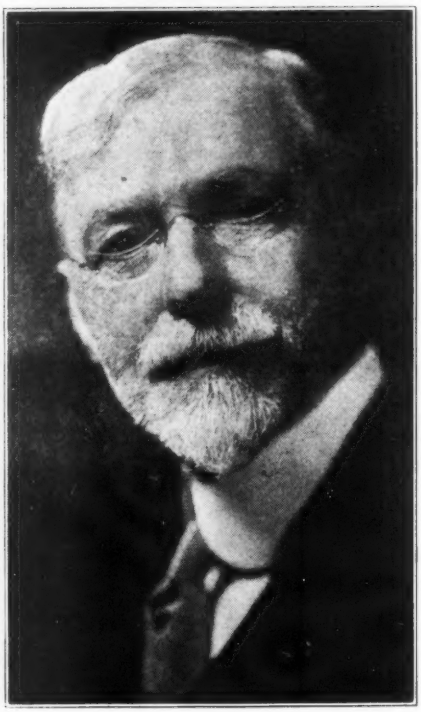
Committee D-2's Work on Oil Tests

Report of Sub-Committee XXIII on Carbon Residue Submitted at 1928 Meeting of American Society for Testing Materials

By Dr. Florus R. Baxter

Vacuum Oil Co., sub-committee chairman



Dr. Florus R. Baxter

Report of Sub-Committee XXIII on Carbon Residue

During this year, two suppliers of instruments to the oil trade objected to the narrow limits for the weight of the spun sheet-iron crucibles specified in the Standard Method of Test for Carbon Residue of Petroleum Products (Conradson Carbon Residue) (D 189-28).[1] Both suppliers stated that the limits of 70 to 75 g. (about 2½ oz.) cannot be easily complied with and requested a greater tolerance.

The sub-committee agrees that the limits should be changed to read 65 to 85 g. (about 2¼ to 3 oz.) and recommends a tentative revision of the standard method in this respect.

Criticisms were also made of the procedure but the sub-committee feels that the report submitted does not warrant recommending that the method be withdrawn or again made tentative. This report covered regular tests, including carbon residue determinations on a sample of bright stock which had been submitted to ten cooperating laboratories. Two of the carbon residues were so low that, following the usual practice in computing averages, they should have been discarded. Omitting these, all the remaining results are within the range of 10 per cent each side of the average, or a total range of 20 per cent.

One of the criticisms is against the range in time of burning, with the suggestion that it be narrowed, but reference to Table III of the 1927 report of Sub-Committee XXIII[1] will show that the accuracy of the method depends on strict attention to the different burning periods rather than on a narrower range. Runs Nos. 1 and 2 in that table show what happens during the stewing down "burning period" when unnecessarily prolonged to overcome the effect of a too rapid "pre-ignition" period. All results given in the table were secured by an operator who has had long experience with the test and were taken purposely to learn what would happen by varying the time in the different periods. The heat must be applied at a steadily increasing rate as in any distillation, with the flame held between the top of the chimney and the bridge, if reproducible results are expected.

The Atlantic Refining Co. submitted two samples for test, the results of which, given in Table I, show the reproducibility of the method.

[1] 1928 Supplement to Book of A.S.T.M. Standards, p. 129.

[1] See *Proceedings*, Am. Soc. Testing Mats., Vol. 27, Part I, p. 475 (1927).

TABLE I

Comparison of Carbon-Residue Determinations by Two Laboratories on Two Different Oils

Sample	Laboratory	Pre-ignition period, minutes	Burning period, minutes	Final period, minutes	Total time, minutes	Carbon residue, per cent
No. 1	Vacuum Oil Co.	11.5	13.0	7.0	31.5	3.88
		10.5	14.0	7.0	31.5	3.93
					Average	3.90
No. 1	The Atlantic Refining Co.	.....	13.5	7.0	31.0	3.84
		10.5	13.0	7.0	31.0	3.83
		11.0	Time not noted			3.79
			Time not noted			3.90
					Average	3.84
No. 2	Vacuum Oil Co.	11.5	12.5	7.0	31.0	1.50
		10.5	11.5	7.0	29.0	1.50
					Average	1.50
No. 2	The Atlantic Refining Co.	.....	13.0	7.0	30.0	1.69
		10.0	15.0	7.0	32.0	1.70
		10.0	Time not noted			1.46
			Time not noted			1.59
					Average	1.61

Ready Made Turns for Welded Pipe

CLEVELAND, Aug. 8.—New shapes for making direction changes in welded pipe, and their development, are described in an article in the July 20 issue of the news edition of *Industrial and Engineering Chemistry*. The article is written by E. G. Luening, vice president and chief engineer of Tube-Turns, Inc., Louisville, Ky.

The author points out that until recently the pipe welder had at his command only two methods for changing the direction of welded pipe. One was pipe bending and the other was the mitred joint. Tube turns are manufactured turns of various angles designed for welding into pipe lines to avoid the necessity of bending the pipe.

Meeting for Texas Jobbers Planned

HOUSTON, Aug. 8.—The first convention of the newly re-organized Texas Petroleum Marketers Association will be held at the Plaza Hotel at San Antonio Oct. 3, 4 and 5, according to L. H. Flinn, executive secretary and counsel.

Every marketer is urged to attend and a valuable program is promised. The future of the association will depend to quite an extent upon the success of this meeting, Mr. Flinn says in a letter he is sending out to members.

Wives of marketers are invited. There will be a banquet and ball on the evening of Oct. 4.

Builds 2,500 Barrel Skimming Plant For Less Than $50,000

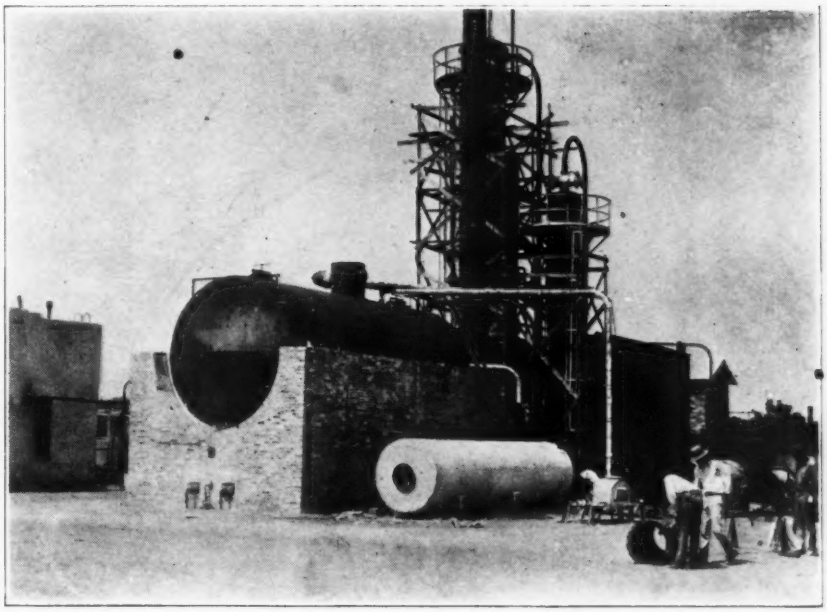
By Allen S. James
N. P. N. STAFF WRITER

BRISTOW

A SKIMMING plant capable of handling 2000 to 2500 barrels of crude oil a day, making two grades of gasoline and one of naphtha, furnace distillate, gas oil and fuel oil, was recently completed and placed in operation by the Producers Oil Co. at Bristow at a cost of considerably under $50,000.

The Producers Oil Co. started in the producing and refining business about three years ago with the purchase of the interests of the Roland Oil Co., operating the Roland plant until about a year ago when it took over the refinery and pipe line properties of the Interocean Oil Co. It has been running both plants at capacity until recently, when it completed the plant which will handle almost twice as much crude a day, at a savings in fuel and maintenance and labor costs.

The economical cost of construction was due primarily to the fact that virtually all the equipment with the exception of the fractionating towers and condenser sections were used material. The unit was constructed under the supervision of C. H. Fox, who has been in charge of refinery operations at the two plants for the past two and a half years.



This new distillation unit was built at a low cost by the Producers Oil Co., and will handle 2,000 to 2,500 barrels of crude a day. The picture was taken about four days after the unit had been put on stream and before all the insulation had been placed on the still. The scaffolding around the towers was also still in place—N. P. N. staff photo

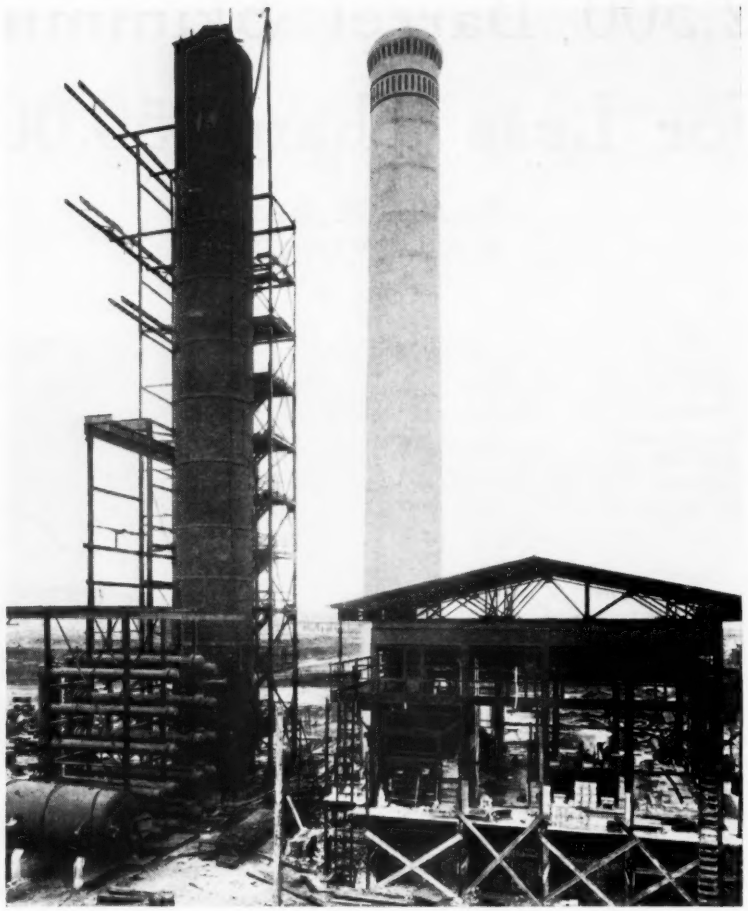
A visible indicator easily seen was devised by Superintendent Fox for the still and the settler of the new unit at the Producers Oil Co. This indicator is on the settler. The workmen are just completing the insulation of the settler—N. P. N. staff photo

The unit is shown in an accompanying photograph, taken shortly after it was placed in operation, and before the scaffolding had been torn down and the still completely insulated. The still is of the shell type and is 750 barrels capacity. It is operated on continuous stream.

At the side of the still, as shown in the photograph, is a crude oil settler. Between the still and the condenser boxes are the smoke stack mounted on a fuel economizer, and the three towers. Behind the condenser boxes is the receiving house.

Considerable time was lost in operating the older units because of frequent shutdowns for cleaning out, due to the character of the crude the company uses. The larger settler, will, Mr. Fox believes, minimize this loss of time.

The location of the refinery on the side of a hill eliminates the necessity of pumping the crude oil from storage. The tanks are located on top of



10,000 Barrel Atmospheric Distilling Units

An atmospheric distilling unit, designed with rated capacity of 10,000 barrels per day of average Mid-Continent crude, is shown under construction in the above photograph. The tower is arranged for the continuous removal of light gasoline from the top as vapor, liquid side streams of naphtha, kerosene, gas oil, pressable wax distillate and two lubricating distillates; running to asphaltic flux residuum which is removed from the bottom.

The complete refinery was designed and is being erected by the Foster Wheeler Corporation. It includes fractionating tower, tube still (shown at right), the necessary heat exchangers, condensers and coolers; stack, pumps and all accessories for complete operation.

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the hill, and the crude flows by gravity to the plant, which is about half way down the hill.

The crude goes directly to the heat exchangers and closed reflux coils where heat from the vapors, gas oil and fuel oil is picked up by the exchange. It then goes directly to the flash tower, which is equipped with stripping and bubble decks and reflux sections. This permits the taking off overhead from the flash tower a 15 per cent yield of 64-66 gravity gasoline with an easily controlled end point. The flash tower is 4 feet in diameter and 33 feet high.

The crude travels from the flash tower to the settler, and is pumped through the economizer in the base of the smoke stack into the still.

The fractionating tower is of the conventional type, and is 5 feet in diameter and 51 feet high. The tower temperature is maintained within 10 degrees of the still. The tower is equipped with cast iron bubble and stripper decks, closed reflux sections and has a liquid level and automatic temperature control.

The second overhead stream of gasoline is taken off the top of the fractionating tower. The gas oil stream is taken off from the middle of the tower and into a third and smaller tower. From the bottom of the fractionating tower a gas oil cut is taken off.

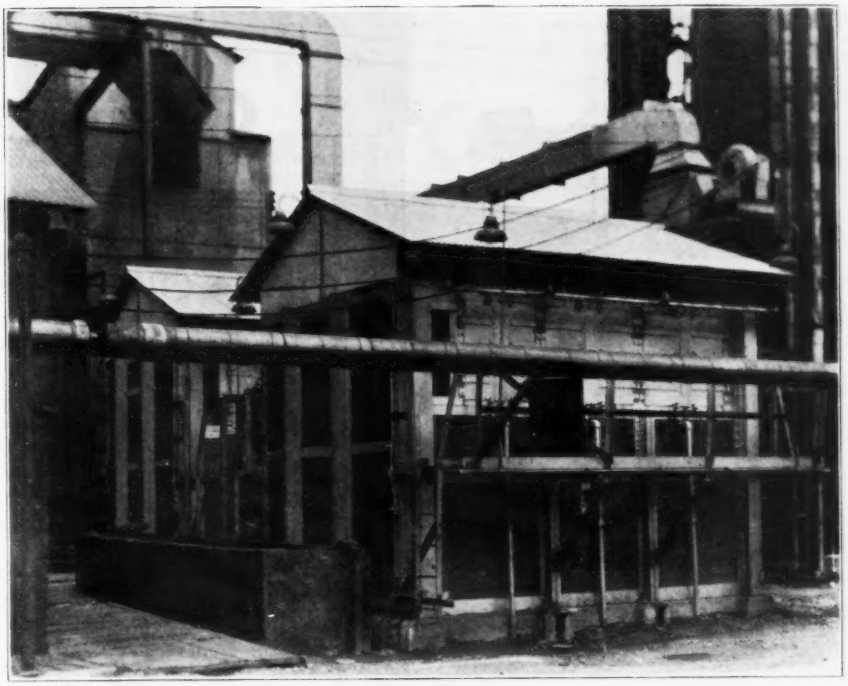
A third overhead stream is taken off from the top of the No. 3 tower, this product being 48-50 naphtha. A 38-40 gravity distillate stream is taken off from the bottom of the No. 3 tower.

This gives four overhead products, i. e., a 64-66 gravity export gasoline, a U. S. Motor specification gasoline, a 48-50 gravity naphtha and a 38-40 gravity distillate. The fifth stream is gas oil.

Gravity is used in handling the fuel oil. The 10,000 barrel storage tank is located at the bottom of the hill. The top of the tank is slightly below the level of the refinery, and the fuel oil flows by gravity into the tank.

Mr. Fox has installed an automatic liquid level control on the still which regulates within half an inch the level of the crude in the still. The control valve is on the fuel discharge line from the still to the exchanger. He also has devised a visible indicator which shows by a pointer the approximate level of the liquid in the still. An accompanying photograph shows one of these indicators, this one having been placed on the settler.

The water supply consists of a deep reservoir and cooling tower. The make-up water supply for the plant is obtained from a deep well, which supplies 10 to 12 gallons of water a minute, which insures economical operation.



An economizer is located in the base of the smoke stack, shown in the picture above. The safety ladders for the towers can be seen inside the scaffolding—N. P. N. staff photo

The cooling water goes first over the gasoline streams in the condenser boxes and then flows into a smaller box located back of the rundown house through which are passed the heavy oil lines. In this way the water is used twice for cooling before it flows by gravity to a reservoir, the overflow from the reservoir going into a small creek which winds around the base of the hill.

In laying out the various pipes to and from the new unit, Mr. Fox used 45 and 90 degree bends instead of elbows and "T's" on all the permanently placed lines. This plan cuts down friction, with the result that smaller pumps can be used.

The various automatic controls and the compactness of the unit enables it to be operated with a minimum of labor. If necessary the entire unit can be operated by one man.

The company has an excellent demand for its naphtha, distillate and fuel oil. The latter product is a zero to 10 degrees F. oil, of 22-26 gravity, which is an excellent Diesel engine fuel. Approximately 90 per cent of the output is sold for this purpose.

The gasoline produced requires very little treating and the raw product will easily stand the corrosion test indefinitely, Mr. Fox said. The fact that the overhead product from the flash tower can have a 64-66 gravity with almost any endpoint desired makes the gasoline desirable as a specialty. The gasoline taken off from the fractionating tower is regulated for U. S. Motor specifications.

The plant was designed primarily for efficient and economical operation. The principal feature in its construction is that one shell still is producing the various commercial grades of products, operating as a continuous unit with a high throughput.

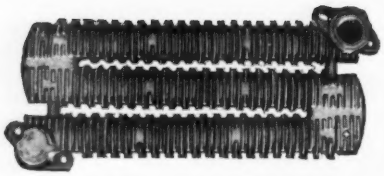
Attorney Becomes Richfield Oil Executive

SAN FRANCISCO, Aug. 9.—Bradford M. Melvin, attorney of San Francisco, has been elected vice president, secretary and general counsel of the Richfield Oil Co. of California, Los Angeles, according to James A. Talbot, chairman of the board.

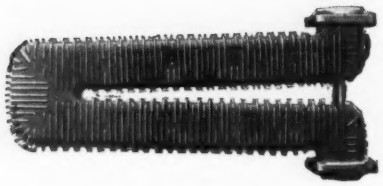
Mr. Melvin has been senior member of the law firm of Melvin & Sullivan, of San Francisco. He was formerly assistant city attorney of San Francisco and was attorney for the Pacific department of the General Electric Co., and the Fidelity & Deposit Co. of Maryland, among others.

He was born in Oakland, Calif. in 1894 and is the son of the late Judge Henry A. Melvin, who was associate justice of the supreme court of California.

NEW YORK—The Venezuelan congress adiourned July 17 from its annual session without passing any legislation that affected the petroleum industry.



14 Sq. Ft. Condensing



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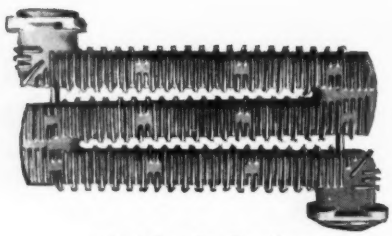

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New Pipe Stills in Pennsylvania Plant Improve Products and Cut Costs

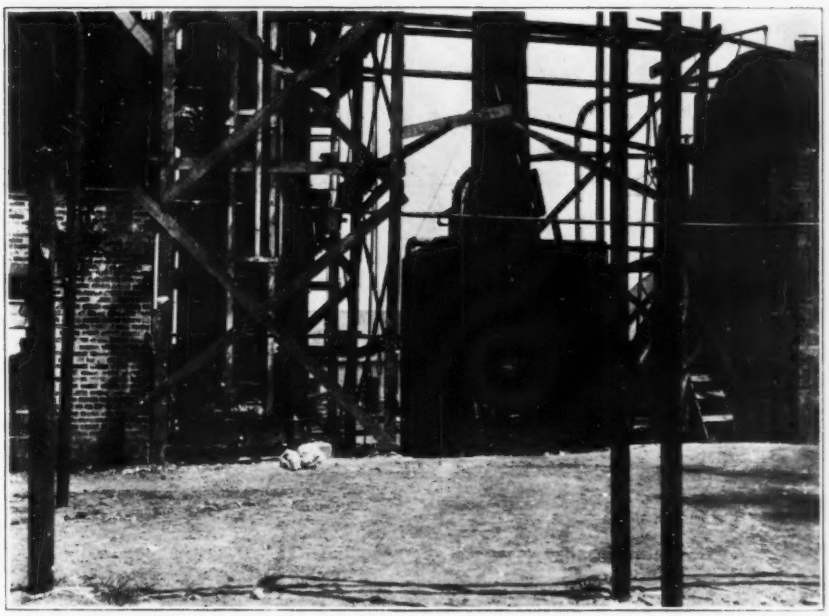
By Paul Truesdell
N. P. N. STAFF WRITER

OIL CITY, Pa.

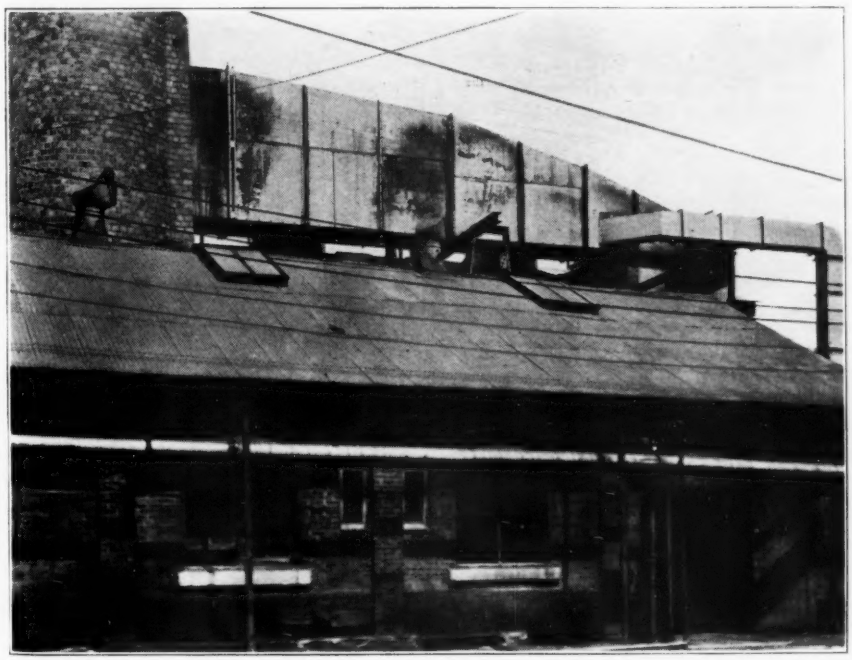
TWO modern pipe still distillation units have been fitted neatly into the equipment and operating schedule of the Independent Refining Co., Oil City. They don't take up very much room in this plant where space, as in most Pennsylvania refineries, is at a premium.

The new units did not displace any of the older equipment. They supplemented it. They have increased the capacity of the plant considerably, they have reduced the cost of manufacturing certain products and they have improved the quality of the products, according to P. S. Tarbox, secretary and general manager of the company.

Each unit consists primarily of a pipe still and bubble fractionating tower. They stand side by side in a compact space and they were designed and built by E. B. Badger & Sons Co. to fit the particular needs of the Independent plant. One of the units operates under reduced pressure and the other at atmospheric pressure.



The two pipe stills, showing the small space they occupy. The one in the foreground is the vacuum still and the one at the rear the atmospheric pressure unit



Because of space limitations the stack had to be built at a considerable distance from the furnaces whose flue gases it was to take and underground flues were impractical. This picture shows the overhead flues and breechings which carry the gases from the two pipe stills and the boilers into the stack. Another stack of similar size, not shown, takes care of the shell crude and rerun stills

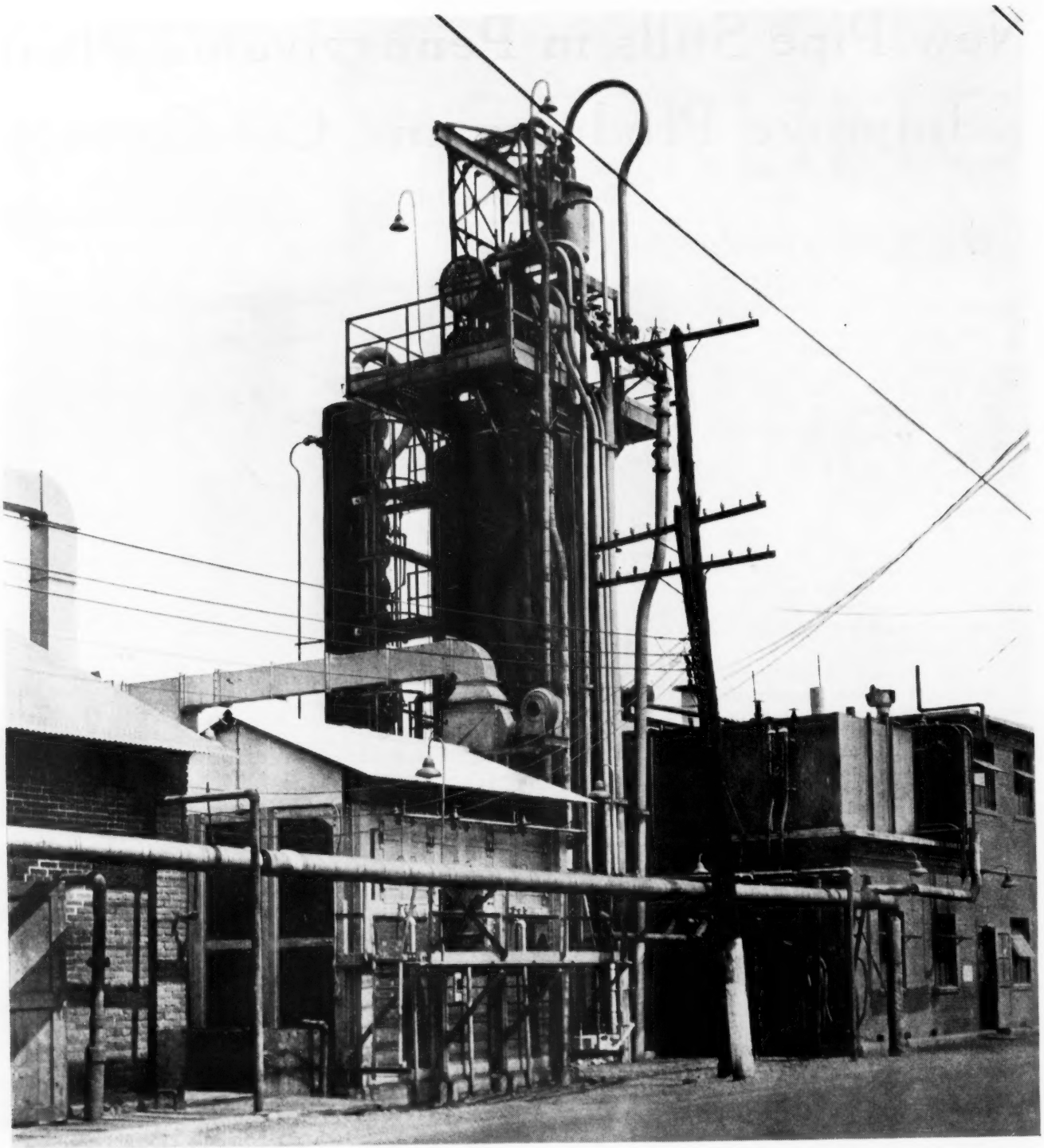
The vacuum still operates continuously while the other unit, although on a continuous schedule when in operation, is intermittent in its activity.

The Independent refinery is running partly on Bradford crude, partly on crude from the National Transit lines and partly on Eureka pipe line crude.

Aside from the new units, the distillation equipment of the Independent consists primarily of eight shell stills of different sizes. Four of these are in continuous crude service and the other four are used intermittently for various purposes, Mr. Tarbox explains.

Four of the shell stills are equipped with fractionating towers and are connected to make a continuous battery which in turn is connected with the vacuum pipe still unit.

The crude passes through the four shell stills in series. Off No. 1 still a light gasoline stream is taken, off No. 2 a heavier gasoline cut, off No. 3 the water white kerosene cut and off No. 4 the gas oil or fuel oil cut as it is called in Pennsylvania. From No. 4 still the bottoms are transferred continuously by means of a



Vacuum pipe still-bubble tower unit at Independent Refining Co. plant. The smaller fractionating tower of the other unit can be seen behind the big vacuum tower

hot oil pump to the vacuum pipe still.

This unit is under a rather high vacuum, although the figures as to reduction of the pressure are not available. The pressure is reduced by means of a two-stage steam jet, the Elliott injector being used. The tubes in the still are of graduated size, the inlet pipes being of standard diameter and the coils further along being gradually increased in size to match the rate of increase in volume of the vapors as the oil and vapor progress through the still and come more and more under the influence of the reduced pressure. Steam is used both in the shell stills and in the vacuum unit.

Mr. Tarbox points out that one of the features of this vacuum unit is its extreme flexibility. Control of temperature and other conditions over a wide range is possible and it is possible completely to change the nature of products being made within a very short time. Several side streams or no side streams can be taken off the tower at will.

The present operating method is described as follows: The oil and vapors from the pipe still pass into the lower part of the bubble tower. From the top of the tower a wax distillate stream is taken off that is pressable without cracking. This distillate is merely chilled and pressed in the conventional manner. In fact, cracking of wax distillate is a thing of the past altogether at this plant except for such as is bought from other refineries for further processing.

Off the side one stream is taken and this is described by Mr. Tarbox as a heavy automobile stock base,

that is, it is suitable for blending with neutral to meet specifications for motor oil. The bottoms from the tower are of course, raw steam refined stock. They are pumped out, diluted, filtered and centrifuged to make a finished bright stock.

The products from the wax press, of course, are wax and pressed distillate. The former is sweated and handled in conventional fashion and the pressed distillate is pumped to the second pipe still distillation unit. In this as in the vacuum unit, an overhead and a side stream are taken off.

The overhead stream is gas oil, the side stream is a non-viscous neutral and the bottoms are raw viscous neutral. This latter product is filtered to make a finished oil, the equipment being operated to take off whatever part of the lighter fractions is desired to make a finished neutral of the required flash, fire and viscosity.

Running the pressed wax distillate to specifications is only one of the functions of this pipe still unit. Its other job is to reclaim the naphtha from the dilute bright stock solution after the solution has been filtered, chilled and centrifuged. The unit alternates in these two services.

BECAUSE of the demand on the unit for rerunning neutrals, a considerable part of the recovery of naphtha from the filtered stock solution still has to be done in the four shell stills mentioned. The cost of reclaiming the naphtha in the pipe still unit is estimated to be considerably less than the cost of doing the same work in the shell stills.

The gas oil from the straight distillation and rerunning processes is charged to two Bruin cracking units. The Independent markets two grades of gasoline. One is a U. S. Motor of 60-62 gravity and the other corresponds to the new Motor Fuel V specifications of the Federal Specification Board.

The lighter and heavier gasoline streams taken from stills 1 and 2 in crude distillation as described, and the product from the cracking stills are blended to make these two grades of finished gasoline.

One single outlet takes practically all the lubricating oil produced by the Independent Refining Co. and the products are made to fit the requirements of this one purchaser. The qualities and tests of the oils made could, however, be varied over a wide range to meet other demands of the market, it is stated.

The oils produced are said to have very good qualities such as low cold test, high flash and fire and very low carbon residue and Holde asphalt tests.

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Linking Beauty *with* Quick Service

By Roger B. Stafford
N. P. N. STAFF WRITER

Select Tire Service, Inc., one-stop station at Pittsburgh. Select Tire Service is a Goodrich subsidiary

PITTSBURGH

SPEEDY service amid attractive surroundings has been incorporated into the new one-stop service station of the Select Tire Service, Inc., Pittsburgh, a company wholly owned by the B. F. Goodrich Co., Akron rubber manufacturer. This station is an example of the super-service stations Goodrich, Firestone, and one or two other tire manufacturers are building.

The Select station is an attractive structure in the modern art style. It has a gray limestone facade but the rest of the station is of light buff brick. The facade is trimmed with the brick and with copper mullions that rise from the ground to the top.

The most prominent feature of the station's architecture is the colored tower which rises 60 feet above the ground and is illuminated at night with a series of concealed lamps and a brilliant lamp as a finial. The front of the building also is illuminated with two floodlights which are mounted one each on standards at the ends of the pump island. Each standard also has two pendant lamps with white glass globes.

The tower is of copper on a steel skeleton. The short base is white with red diamonds such as are used in the Goodrich trademark. Above the bases the octagonal shaft is in three sections. Each section is smaller than the one below it. This stepping of size makes possible the concealing of the lights which are directed upward along the next higher section.

The top section is red toned from light at the base to dark at the top. The middle section is green and the lowest section blue, each of which is toned from light at the base to dark at the top.

The station is on a lot which fronts 130 feet on Baum boulevard and is 120 feet deep. Baum boulevard is one of the main thoroughfares into the East Liberty district of Pittsburgh. At one side of the station is Roup street and a half block away is Negley avenue, another through street.

The building is centrally placed on the lot and far enough back from the sidewalk to permit two ample driveways and a narrow park space in which are shrubs.

The pump island has four double meter outlets for the four grades of gasoline handled—Atlantic regular and Ethyl, and Gulf regular and No-Nox. The colors used by the Atlantic Refining Co. and Gulf Refining Co. are used by Select on its pumps. The Atlantic's cream white is used also on the lamp columns at the end on which are the Atlantic's pumps, and Gulf's orange on the other standard at Gulf's end of the island.

The colors are carried to the lubricating oil tanks inside the station, where a battery of 12 rectangular tanks are painted cream white, orange and red. The red tanks contain Mobiloils.

On the island there is a Mobiloil bottle rack and baskets of bottles for Gulf and Atlantic oils.

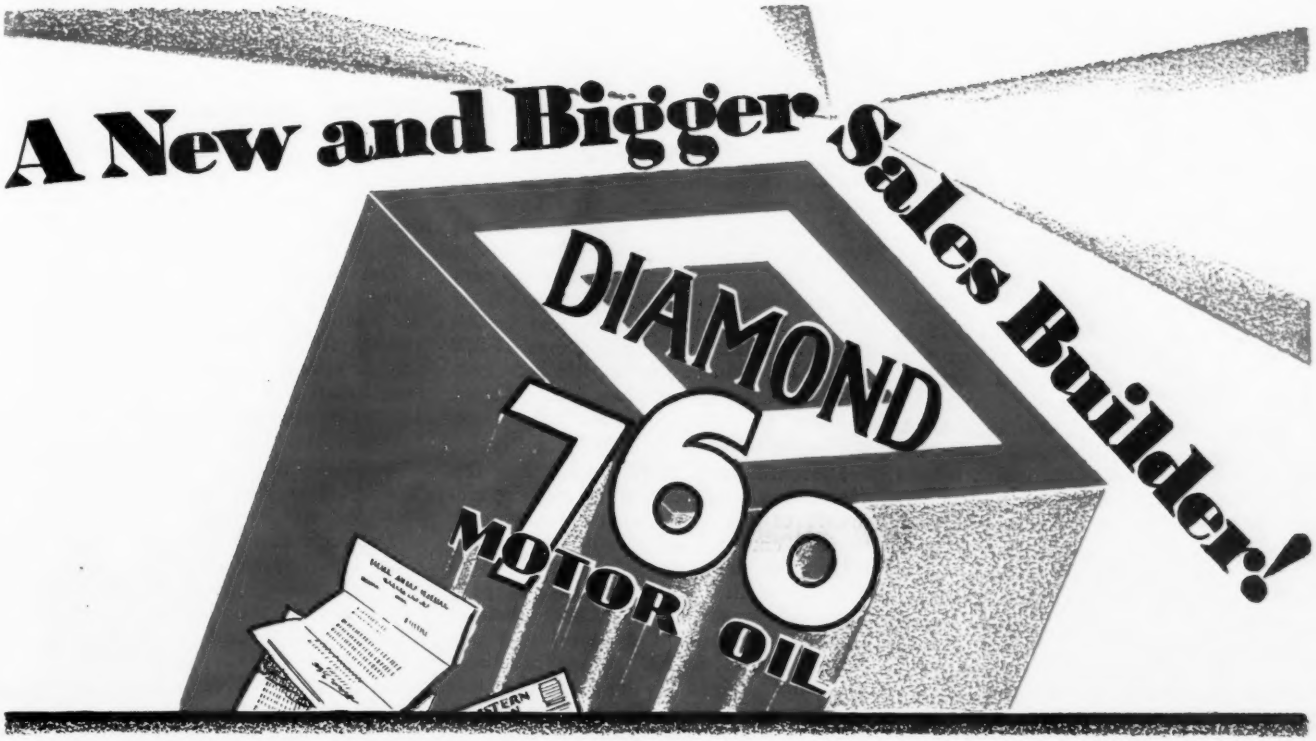
The station building is laid out and equipped for tire sales and repairs, battery sales and repairs, car lubrication and car washing. So far no wheel aligning, or brake testing and adjusting has been done, although such service may later be installed, said J. B. Roberts, general manager.

At the front of the building with entrances from the Baum boulevard side, are the offices, sales and waiting room, women's rest room and double drive entrance to the tire, battery and lubrication departments. These departments may also be reached from the side street.

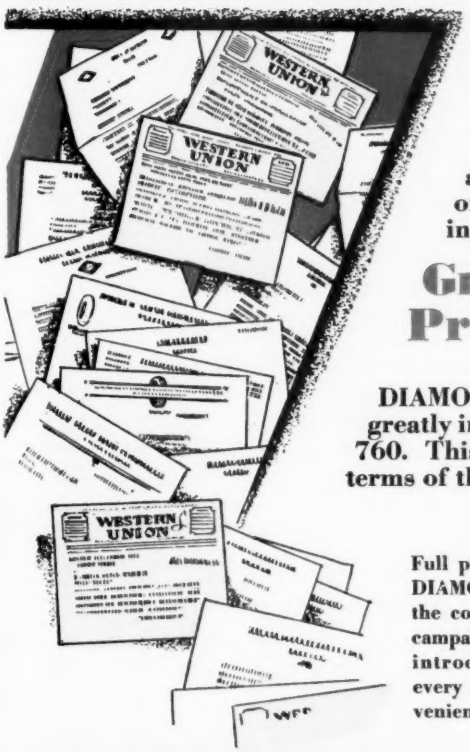
Along the rear of the building are the battery and tire repair departments, service manager's office, stock room and laundry. Three free-wheel lifts are in the main service room, opposite the Baum boulevard entrance.

The main service room has space for storing about 20 cars and there

A New and Bigger Sales Builder!



. . . from dealers and jobbers everywhere have come hundreds of letters and telegrams telling of the unparalleled success that this new 100% heat resisting lubricant has established . . . . . .



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is additional space outdoors at the left of the building, and for trucks at the right of the building. The station does a large truck tire business and in an L at the right rear part of the building, near the laundry, is an hydraulic press for removing and installing solid tires.

The laundry is the only part of the station where facility of movement has not been emphasized. It is necessary to drive down an alley and back into the laundry or make a right angle turn to get in. It is on a level slightly lower than the main station because of a natural falling away of the lot.

The station, without its equipment, cost approximately $90,000 and the lot is valued at $100,000, which makes the total layout with equipment close to $200,000. In addition to Manager Roberts and the office employes, the station has a man power of 32 under two service managers.

There are six men on oil and gasoline sales, three on the lights, two washers, one battery man, and two service managers, so there is a responsible person at the station from 7 a.m. to 11 p.m., the hours the plant is open. The remainder of the 32 are engaged in tire work which in the two months the station has been operating has brought in more than 60 per cent of the station's receipts.

Gasoline and oil sales have formed about 25 per cent of the business and batteries, washing and lubrication has made up the remainder. The station has not yet had a chance to show what the battery department will amount to because winter is the best season for that part of the business.

The station has six salesmen selling tires and operates three light trucks and two motorcycles with side cars in handling its tire business. It is advertising in newspapers, and by direct mail. Its mailing list has 15,000 prospects and another file of customers is being built up. One young woman is employed exclusively on sales promotion work.

Postcards are used mostly for the direct mail matter and all departments of the station are covered by various cars. Trade leaders are used. One week a quart of Gulf oil was offered with each five-gallon purchase of gasoline. Another week it was a quart of Atlantic oil and another week Mobiloil. These offerings not only helped to spread the use of these oils, Mr. Roberts said, but also stimulated the gasoline sales.

The pump men always ask to fill the tank. They check oil, wipe windshields and rear windows, and try to direct trade to the other services by inquiring about lubrication, washing, batteries and having the tires checked.

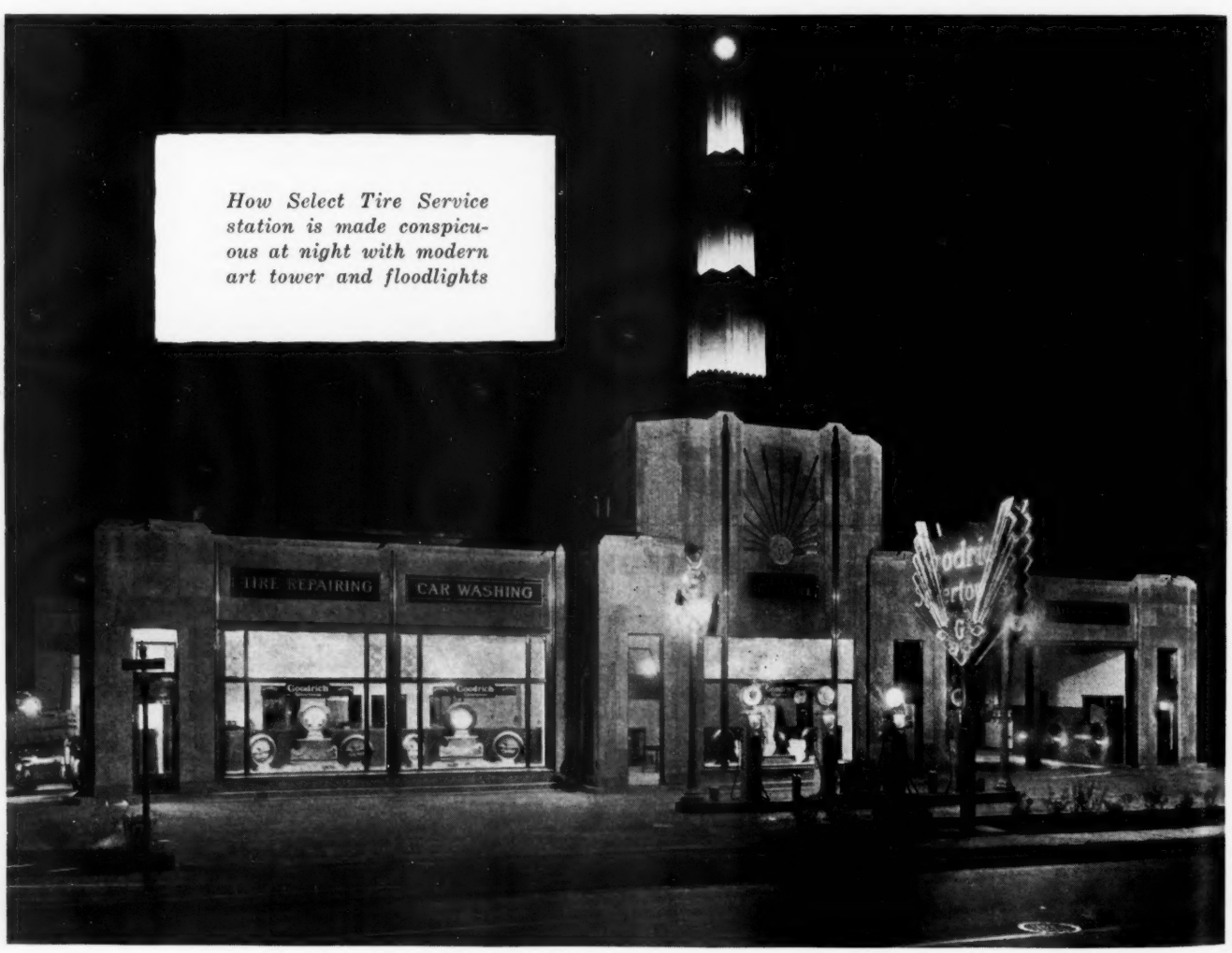
Whenever a car is given any kind of service it is inspected and the customer's attention is directed to anything that may need attention.

The Select company owns all the equipment used in handling gasoline and oil. It has four 1000-gallon gasoline tanks under the concrete driveway in front of the building.

The company uses only two of its three lifts for crankcase draining. A waste oil receiver that can be swung in any direction and which has a telescopic sleeve that may be lengthened or shortened to reach the outlet in a crankcase, has been set between these two lifts. The oil is drained through the receptacle into a filter and then into a 2000-gallon tank for use in heating the station.

The concrete floor of the main station is swept several times each day with a sweeping compound. Each night before the station is closed a cleaning compound is sprinkled on any oil or grease spots around the lights. The oil or grease is "cut" during the night and may be flushed off with water in the morning. The outside drives are flushed every morning and during the day if necessary.

Every effort is made to attract women customers. The waiting room



How Select Tire Service station is made conspicuous at night with modern art tower and floodlights

Robber Alarm Placed On Pump Island

CONCEALED on the pump island of the Select Tire Service station in Pittsburgh are two electric buttons which are connected with a loud bell back in the station. The bell has two purposes:

1. It is used to summon aid from other departments of the station whenever a rush develops.
2. It is used to summon aid in case of an attempted robbery.

It would be possible for oil companies with stations in districts where police protection is scant to install large bells or sirens which would summon aid or frighten robbers away.

has rugs and comfortable upholstered chairs and davenports. The women's rest room contains two Windsor chairs, Windsor settee, console table and mirror.

In the waiting room, which is separated from the office only by a railing, are several small floor cases in which some day-to-day necessities for automobiles are displayed.

There are two large display windows along the automobile drive in front.

Gold and blue signs are placed over the display windows and other entrances to the station. At the sidewalk is a new art neon sign in many colors. This sign contains the Goodrich trademark and the name "Goodrich Silvertowns."

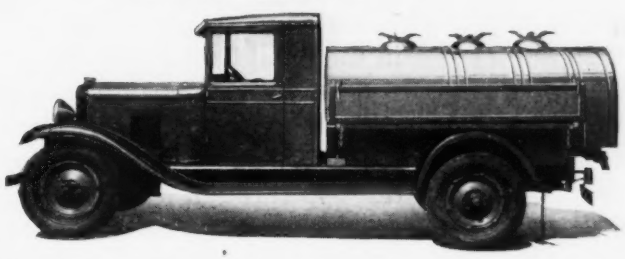
Also at the curb are three yard signs advertising the three makes of motor oils handled.

The station is manned sufficiently to give quick service. However, with six salesmen selling tires to fleet owners and other car owners, it is not dependent on the casual gasoline and oil buyer to get tire business into the station.

The station has some one-stop competitors nearer the downtown section of Pittsburgh, and Montgomery Ward & Co. has acquired property in the neighborhood of the Goodrich station on which the Chicago concern will build an automobile store similar to the 10 opened lately in Chicago.

The Goodrich station is so new that it is impossible to ascertain whether the oil and gasoline and lubrication departments will pay as well proportionately for the space they occupy as the tire department, which has the benefit of the sales force behind it. But it is in position to refuel many cars in a day because its drives are designed for easy entrance and exit, and its equipment to expedite service.

5 DAY SERVICE!



BECAUSE of its modern methods and ample facilities, Columbian is prepared to render exceptional service to customers in urgent need of oil marketing equipment.

Within *five days* after an order for a Columbian Truck Tank is received, we have it *completed* for shipment.

In emergencies, Columbian service has even exceeded that mark.

Write us or one of the distributors or branches listed below for full information on Columbian oil marketing equipment and our complete, illustrated price list, which is sent on request.

COLUMBIAN STEEL TANK COMPANY

EST'D 1894 — TANKS FOR THE WORLD

1405-1625 WEST 12TH STREET KANSAS CITY, MISSOURI

BRANCHES: 30 Church Street, New York 408 Chamber of Commerce Bldg., Denver 564 Market Street, San Francisco.

DISTRIBUTORS: Herman Body Co., St. Louis Truck Engineering Co., Cleveland Highland Body Mfg. Co., Cincinnati Wm. Ford & Co., Highland Park, Mich. The Schnabel Co., Pittsburgh Truck Equipment Co., Buffalo Perrin Walsh Co., Boston Interboro Hoist and Body Corp., Long Island City Philadelphia Truck Equipment Co., Philadelphia Maryland Truck Equipment Co., Baltimore and Washington, D. C. Dixie Culvert & Metal Co., Atlanta and Jacksonville, Fla. The Equipment Co., Nashville Leland Truck Equipment Co., Tulsa and Dallas San Antonio Body Co., San Antonio California Columbian Steel Tank Co., Ltd., Los Angeles Western Steel Products Co., Duluth A. Y. McDonald Mfg. Co., Omaha, Lincoln, Sioux City and Des Moines.

OUR Navy's protection to our coasts is the Nation's insurance of future prosperity. Derby's protection to its dealers is their insurance of sharing this prosperity. A protection based on quality petroleum products with unified co-operation in merchandising.

There are many reasons why you should insure your business with this protection. A few of the principal reasons are as follows:

FIRST—Derby is an independent producer, bringing its own production through its own pipe lines to their own refineries so you are assured of always receiving a uniform product—of unequalled quality.

SECOND—Derby owns its own fleet of tank cars guaranteeing you reliable, prompt, efficient service on any quantity ordered.

THIRD—Derby insures the protection of your business because Derby does not operate a chain of filling stations of their own. You are not helping to establish, by your local standing, a name and reputation for a product which may be taken away from you by the producer at any time. You, and you alone receive the full benefit by building up your business, under its own name, on its own merits.

There are many other reasons for this SURE PROTECTION. If you order a trial car to-day you will learn of them and be taking out the best possible insurance policy on your future business.

To Derby Service
DERBY OIL CO.
GASOLINE
MOTOR OILS & GREASES

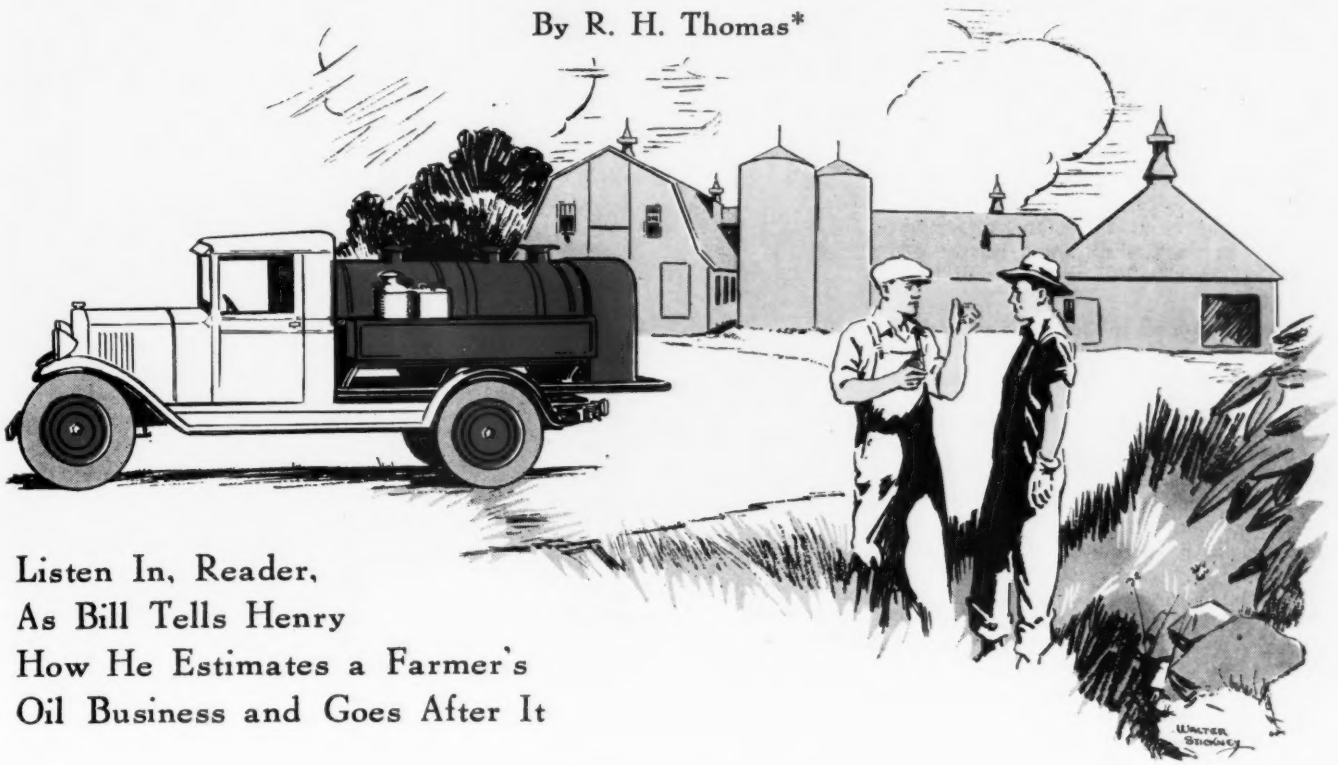
The Derby Oil & Refining Corporation

PRODUCERS AND REFINERS

WICHITA, KANSAS

SALESMANSHIP from the TRUCK SEAT

By R. H. Thomas*



Listen In, Reader, As Bill Tells Henry How He Estimates a Farmer's Oil Business and Goes After It

RECENTLY a manager for one of the oil companies had just finished discussing with his rural tank wagon men, methods for reducing marketing costs and increasing the volume. He clasped each of the boys by the hand and slapped him on the back as he bade them goodbye and immediately stepped into his car to be taken to another point where a similar meeting was to be held that evening.

I noticed quite a few of the tank truck salesmen gathering around a fine looking chap of about 30. He had a pleasant personality and determination written all over his face. Later, in the hotel lobby, I overheard the following conversation between this man and another company rural station agent. "Bill," opened up the latter, "How do you manage to bust all your quotas, operate your business so economically, and always lead the division on sales and collections?"

"Well, Henry," Bill replied, "Perhaps it's because I have a little different method of planning my work and working my plan."

"Tell me how you work it," pleaded Henry. "I'm tired of being a 'tail-ender.'"

"There's not much to it, Henry," was Bill's reply, "It won't take long to tell you what little I know.

"In the first place, I study every piece of literature I get from the company, and I hand as much out to the trade as I can. When I call on a man who does not use the goods I am selling, I always make my 'getaway' by handing that man a piece of advertising literature which I believe he will be most interested in—the product I have been talking to him about.

"When the customer reads the literature I have left him, he will find that I told him the truth. Too many tank truck salesmen seem to think advertising literature is a joke. With me it's a real help because it assists me in getting up a good sales talk, and I have found that it beats bluffing all hollow.

"When I don't find the farmer home I always leave some advertising literature in his mail box with a little note reading something like this—'Sorry you were not home today, but I hope everything is fine with you. Will see you in a few days.' Then I sign it. It's just a little human touch that seems to make friends.

"By the way, Henry, have you made a real study of all the company literature on each product you have to sell? Have you organized the facts in your mind so you can make an intelligent, persuasive presentation which will be convincing to a customer?"

Henry didn't reply at once, but finally he spoke up. "To be real honest about it, I don't know anything about the flash, fire-test or viscosity of motor oils. The company won't give me that information and I don't think it's to be found in any of that advertising dope you talk about."

"Well," replied Bill, "Did you ever read about the melting point of babbit; the tensile strength of steel; or the specifications covering the paint job on a high-priced car advertised in the *Saturday Evening Post?*"

"Not that I know of," was Henry's answer.

"No," said Bill, "and I don't think you will either. But one thing is a cinch—those people who can afford them will continue to buy such cars just as long as they can be convinced they will take folks where they want to go, bring them back, give them

* R. H. THOMAS is former sales executive with the Standard Oil Co. of Indiana. He is the author of "Merchandising of Petroleum Products," a practical book on the various phases of the marketing of oil products. This and other articles he will write will appear exclusively in NATIONAL PETROLEUM NEWS.

"Merchandising of Petroleum Products" can be bought through NATIONAL PETROLEUM NEWS for $2.50 a copy.

good service and are good to look at. It's not specifications that sell cars, oil, grease, gear compound, harness oil, polish, belt dressing or anything else. It's service—service the products give plus the service we tank truck salesmen render.'

"I used to worry about fire tests and a lot of other tests several years ago when I first got up on a tank truck, but I soon found out that people don't want a lot of technical dope crowded into their heads—they just want service from the products purchased and from the man supplying them. In fact, they want plenty of proof of service before they will buy at all."

Henry seemed to be listening very attentively and finally asked Bill how he went about it to land a tough customer on tractor oil.

"It won't take long to tell you how I cracked a hard nut a couple of years ago," said Bill. "When weather and bad roads make it impossible for me to get out into the country with the truck, I hop into my old Ford car and go out to solicit customers whose business I have not been getting. That's what I did one rainy day.

"This fellow had a Hart-Parr tractor and was convinced that he couldn't use anything but Oilyeasine Tractor Oil. I didn't argue with him because I knew there would be no profit in winning an argument and losing a sale. He was quite set in his way and harsh in his statements, so I just quit trying to sell him tractor oil and changed the subject to farming.

"'Mr. Wilkins,' I said, 'This is a fine piece of land you own; how long have you owned it?'

"'Well,' says Mr. Wilkins, 'I really don't own it, though I've been on the place long enough so it ought to be mine.'

"'How many acres are you working,' I asked and he said, 'Just a quarter.'

"'All under the plow,' I asked.

"'No,' he drawled out, 'Only 100 acres.'

"'What do you do with the other 60,' I asked and he said that 25 acres were in pasture and the other 35 acres in hay.

"'Well,' I said, 'I wish I knew as much about farming as you do. How many head of cattle does your 25 acres of pasture take care of anyway?' I asked. He said that he pastured 23 head of them. I asked him how long it took him to milk the 23 head.

"'Oh,' he said, 'I only milk eight cows, the rest are young stock.'

Pretty soon I noticed a fine looking bunch of pigs in the hog lot so I asked him—'By jove, Mr. Wilkins, that's a dandy bunch of hogs you have there. How much corn do you need to feed to get a medium weight hog of about 225 pounds these days?'

R. H. Thomas

"Well, he told me—and after a while I found out how many hogs he had. Then I noticed the tractor standing in the yard and asked him—'How many acres can you plow a day with a tractor like that?'

"'Oh, about six acres or so.'

"'Well, do you do it all with your tractor?'

"'About all,' he says, 'and I grind some feed, cut ensilage, shred a little corn and use it for threshing.'

"'For gracious sakes,' I says, 'You must use that tractor 75 or 100 days a year.'

"'Oh, no,' he said, 'Not over 40 days on an average.'

"'If that's the case, you must use quite a few horses. How many do you keep?'

"'Only four,' was the reply.

"Finally we quit visiting and after giving the little boy a stick of Spearmint, I hopped into the old tin Lizzie and I hiked back home.

"The first thing I did when I got home was to make out a card on John Wilkins, Located 6½ Miles Southwest; Renter; Farms 160 Acres; 100 Acres in Crop; 23 head of cattle; 8 milch cows; 65 fine hogs; four horses; general farm machinery; also one 20-35 Hart-Parr Tractor used about 40 days a year; one Buick 1927 car.

"Then I got busy figuring out what his annual requirements would be:

"The tractor operated 40 days should use about 100 gallons of oil, and 50 pounds of grease, 1200 gallons of kerosene and some gear compound. The eight milch cows should require a five gallon can of fly spray if they were to continue being good producers, and also a 25-pound tin of petroleum jelly for their udders. To keep the hogs free from lice, nits and skin diseases, I put down 100 pounds of axle grease to be used in connection with a good rubbing post, and a five-gallon can of harness oil to preserve the four sets of harness. Then I added a gallon can of separator oil—a large sized bag of slab wax for keeping the ensilage from freezing to the walls of the silo, and a gallon can of furniture polish for Mrs. Wilkins.

"Of course I figured on a 15-gallon drum of motor oil for the car and an additional 500 gallons of gasoline.

"The next thing I did was to figure out what this one customer's business would be worth to me in commissions if I could get all of his business. I found that it would easily amount to $40 a year, which would be equivalent to the interest on $1000 in the bank for a whole year at 4 per cent.

"I then checked over my records to see how many Hart-Parr tractors there were in my territory which were using my oil. There were 14. I listed all these owners on a piece of paper and as I went about making deliveries in the country later, I stopped at these various places and asked for a testimonial on my oil and fuel from each one.

"I called on the vice-president of the First National Bank in my town to get a little information about Mr. Wilkins, and found out he was a man hard to convince, but once convinced a sticker. He didn't owe the bank a dime and had an excellent reputation for paying his debts.

"That evening I wrote a letter to the main office to the credit department and I outlined Mr. Wilkins' status and asked for permission to have his name added to the authorized credit list. I explained he was a man whose business I wanted to get and that I wanted authority to offer him 30 days' credit—if necessary.

"The request was promptly granted.

"Within ten days I was back to see Mr. Wilkins, and after a few minutes' conversation I was permitted to put 25 gallons of kerosene in his barrel. When I finished and he signed the ticket for the kerosene, I pulled out my list of Hart-Parr owners and asked—'Mr. Wilkins, do you know the men whose names are listed here?'

"He took the paper in his hand and looked over the names and said, 'Why yes—every one of them.'

"'Well, here are some letters they gave me to show you.'

"He started to read some of the testimonials and became quite interested. Then I said to him, 'The satisfaction secured from the use of our tractor oil and fuel by these neighbors of yours is positive proof of the fact that you will also be thoroughly satisfied with our products as soon as you start using them. There is no question but what our oil will give you the same degree of satisfaction

it is giving the gentlemen who wrote these letters.

"'The tractors are the same—made in the same factory; and the parts are inter-changeable. I just know you are going to be delighted with the service that you will get from our products, as well as the service I will render personally.

"'I have brought with me on the truck a half barrel of the correct oil for your tractor—the oil approved by the manufacturers of your tractor on page 17 of their instruction book.' Then I whipped out a Hart-Parr instruction book and showed him that the oil I was offering was listed among other oils which had been approved by the Hart-Parr people.

"'I want to leave this oil with you', I said. 'Your name has been added to our list of customers entitled to 30 days' credit and you will be as glad to pay for it at that time as we are to extend the credit now.'

"To cut a long story short, he took the oil and it took but a little time to develop Mr. Wilkins into a regular customer. For a year and a half he has been buying his entire requirements of kerosene, gasoline, tractor and motor oils, as well as such specialities I have had to sell, and is one of my best boosters.

"He uses harness oil, cream separator oil, axle grease for his wagons and hog rubbing post, wax for his silo and all of that."

Henry had been very much interested and asked Bill if he had any trouble with the credit department in getting orders passed.

"Not a bit," was his answer, "I always try to get a line on every good customer and forward information to the credit department before credit is asked for. In that way there is no delay in getting orders approved, and you know, Henry, that when a man wants merchandise he generally wants it 'right now.'"

Henry then asked Bill if he routed himself on country deliveries and the reply was—"Most certainly, because that saves unnecessary wear and tear on the truck and tires and saves a tremendous amount in a year in fuel and lubricating oil."

Bill told him there was no more reason for jumping around from one end of the territory to the other, making small fills "phoned in," than there was in plowing two hours on the north side of a quarter-section and then going over the south side to plow for two more. He said there had to be system in making deliveries as well as in the solicitation of business.

"Believe me," he said, "I am always scheming and working to get a big user and a good payer. I am perfectly willing to let my competitors take any of the 'dead-beats,' but I do make it my business to continue adding good new customers to my regular list."

Henry wanted to know why Bill

FACTS

SERIES No. 1

Amazing But True

WINTER motorists demand *starting ease*. They get it now only by sacrificing high viscosity at high temperatures.

A Winter Motor Oil having a cold test of 10° to 20° below zero has an average viscosity of 40 @ 210° F.

The average crank case dilution is 12½% the first 150 miles and 20% for 300 miles traveling. Beginning with a viscosity of 40 @ 210 with that much dilution added, the danger of scored cylinders and burned out bearings is apparent.

All this is changed with an amazing new development in a 15° to 20° below zero cold test motor oil with a viscosity of 56 to 57 @ 210° F. the same viscosity of pure medium Pennsylvania Motor Oil. *That oil is Green Gold Sub-Zero Motor Oil.

Write or wire for samples and full particulars and sales rights in your territory.

THE WARREN REFINING & CHEMICAL CO.
Cleveland, Ohio

For twenty-five years a leader in lubricating specialties

*Also made in a heavier grade with a viscosity of 73 to 75 at 210° F. and 10° below zero cold test.

Veribrite SIGNS

Long Life
Never Fade
Cost Less
Per Year =

PORCELAIN ENAMELED IRON

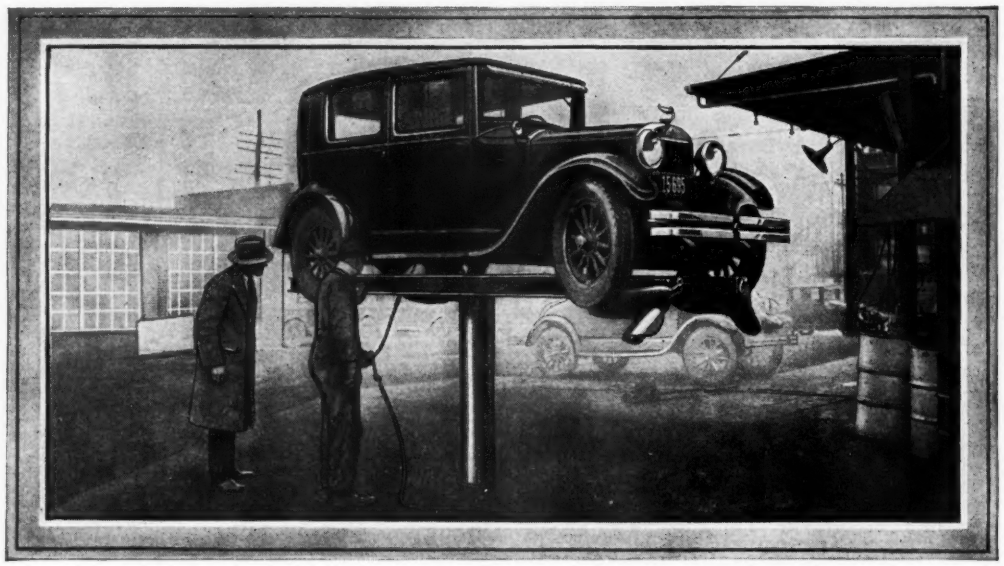
COLORS GUARANTEED 10 YEARS

Here is a source of supply you can depend on. Make a note of it and place in your files for quick reference. Please send sample or specifications for prices.

VERIBRITE SIGNS
Division of
GENERAL PORCELAIN ENAMELING & MANUFACTURING CO.
4105 West Parker Avenue Chicago, Ill.

Compressed air equipment increases profits, because

People are attracted by modern methods~



They like to See!

The Curtis Rotating Lift satisfies their desire to watch the work being done under their car

WHEN you give the public what they want, they always respond by giving you more business! That's why lubrication sales pick up whenever a Curtis Rotating Lift replaces an old-fashioned grease rack or pit.

* * *

Pits and racks conceal your work; the Curtis Lift *reveals* it. Instead of buying "a pig in a poke," the customer can *see* that he is getting what he pays for. And the work is done *twice as fast* on a Curtis Lift.

* * *

The customer gets his car in half the time, and you get more profit, because your labor cost is reduced.

The "75th Anniversary" Curtis Rotating Lift is the *safe* lift. Automatically oil-locked in position; can't move; can't harm you or damage the car. Flush stuffing box design. No pits nor recesses. Roll-on or free-wheel type. By far the most satisfactory Lift for greasing, inspections and all under-car work.

* * *

We have secured unbiased surveys of costs and savings effected by Curtis Rotating Lifts, car washers and other compressed air equipment in all types of garages, service stations, etc. May we send this accurate data to help you select the best revenue-producing equipment?

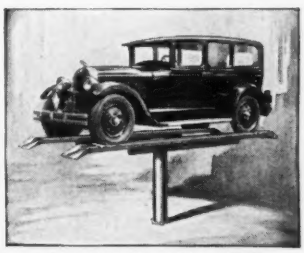
Write for new Catalog C-75

CURTIS

This company was founded in 1854; is, therefore, in its *seventy-fifth* year. Three quarters of a century of successful business existence can be explained only by (1) integrity, (2) sound policy, and (3) financial strength to permit the extensive development and research work necessary to keep our product in advance of competition.

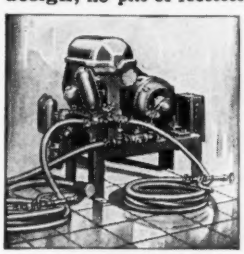
The TIMKEN BEARING Compressor Line

1854 CURTIS 1929
75th Anniversary Line



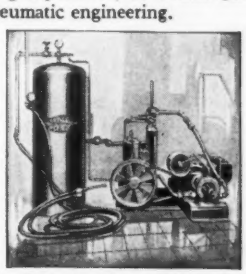
Curtis Rotating Lift

Curtis Rotating Lift increases your profits because it [1] attracts customers, [2] cuts time-cost. Inspecting, lubricating and repairing done in half the time. Lets the customer see the work. This is the *safe* lift for you and for the car. Lift always held in position by positive **oil lock. Flush stuffing box design;** no pits or recesses. Roll-on or free wheel type.



Curtis Hydraulic Car Washer

Curtis Hydraulic Car Washer—A low-priced self-contained outfit. One and two gun sizes. New slow speed **pump, fully enclosed and self-oiling,** specially designed by Curtis for car-wash service. Flooded and direct self-oiling systems. Special alloy-steel rust-resisting double-heat-treated nozzle discs. Automatic pressure governor. This car washer is the result of 75 years manufacturing experience, of which 32 years have been devoted to pneumatic engineering.

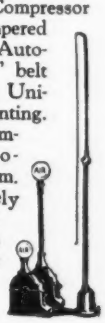


Curtis Compressed Air Washer

Curtis Compressed Air Washer not only washes more cars cleaner than any other power washer, but renders a *complete* cleaning service. Operates cleaning attachments and pneumatic tools, furnishes air for tire inflation, etc. New features are: **Timken** equipped Curtis **duplex compressor;** more compact mounting; reduced weight. Curtis is the only manufacturer building both types of washer, therefore in a position to advise without prejudice.

Curtis Compressor

Curtis Compressor has **Timken** tapered roller bearings. Automobile type "V" belt drive. All Sizes. Universal motor mounting. All-steel base. Improved "Centro-Ring" oiling system. Painted attractively in red and black. Curtis Air Stands —Reel and Tower types with or without water attachments.



St. Louis

Curtis Pneumatic Mchy. Co.,
1965 Kienlen Av., St. Louis—518-Hudson Term., N. Y.
Please send information about .....
.....
Name.....
Address.....

R3

had asked Mr. Wilkins so many questions and the prompt reply was, "I always try to lead my customers out in conversation so I may find out what they have in the way of equipment and how much it is used so that I can estimate their requirements of petroleum products with reasonable accuracy."

Henry asked how Bill went about selling specialties, to which Bill replied he had had a special display rack made to fit on the side of his truck, with a glass side so that customers could see the specialties carried in this rack. "But," said Bill, "When I get into a farmer's yard, I open that case and reach in and pull out the specialty I believe I can sell. If it is a 25-pound pail of axle grease, I show the farmer how absurd it is for him to buy a three-pound tin for 35 cents, paying about 11 2/3 cents a pound for it and then throwing the tin away, when he can buy a 25-pound pail of the same grease from me at a fraction over six cents a pound and have a pail left that he could not duplicate at a hardware store for less than 65 cents, a pail that is ideal for carrying slop to the hogs or milk to the calves. I convince him of the fact that all large organiztaions make money by saving every penny possible in making purchases, and that it is just as necessary for the farmer to save as it is for anyone else."

"If it is furniture polish I am trying to sell, I take the can right into the house and demonstrate it to the housewife, and it is not once in ten times that I am compelled to take the can back and put it into the rack."

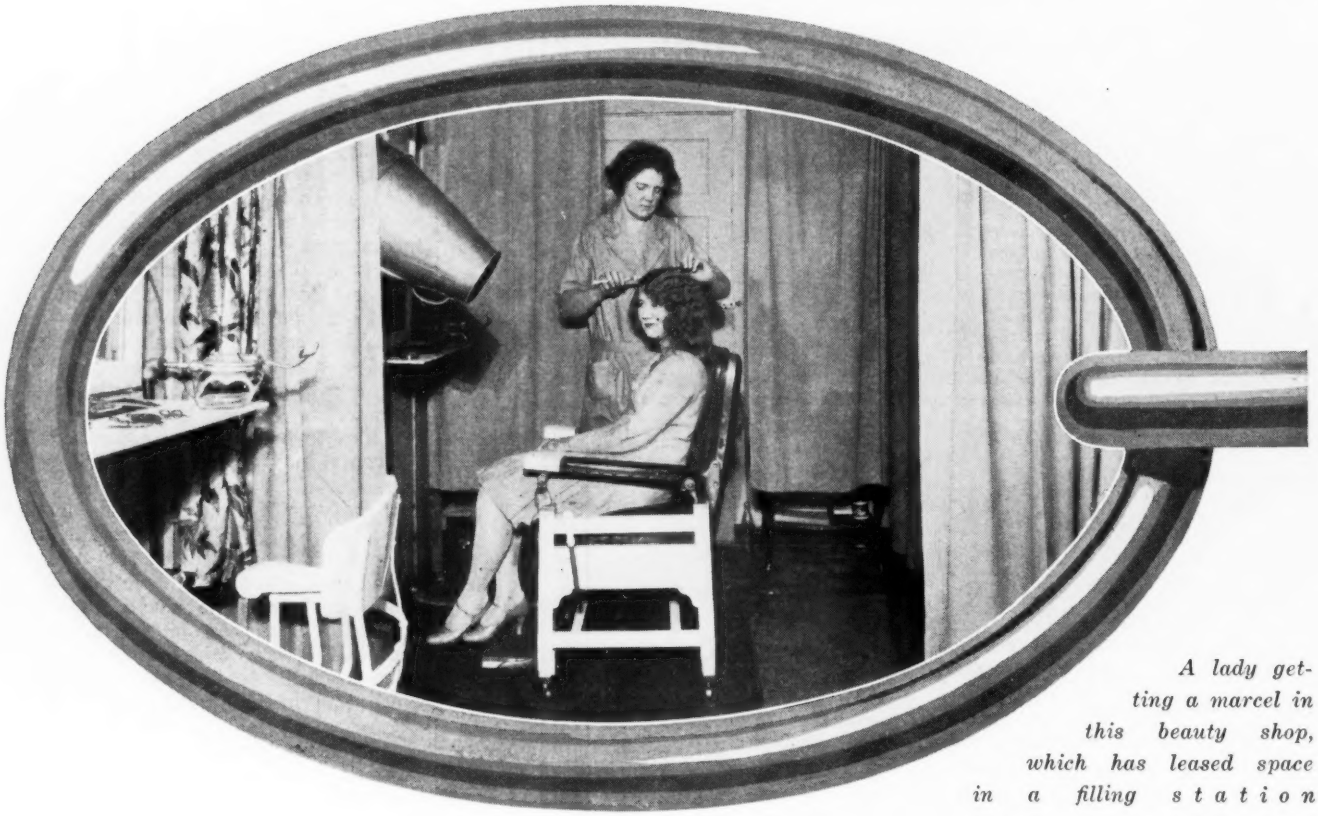
Henry wanted to know whether or not Bill ever had trouble with stock shortages.

"No," said Bill, "Because I always make out a ticket at the time goods leave my possession, even though it might be raining pitchforks—tines down. I believe that most shortages may be attributed to negligence in attending to this most important duty."

Bill was asked if he always collected for small deliveries at the time he delivered the goods and the reply came promptly that he usually did. "I always carry a surplus of blank checks issued by the banks in the community which I serve, and when I deliver anything to customers which amounts to less than $5 I always thank them when they sign the ticket for the goods delivered and tell them, 'This amounts to only $1.75. Would you rather pay it in cash or do you prefer to pay by check?' And they generally do what they know I expect them to do. In this way I am able to keep a great many small accounts off the books."

Henry thanked Bill and said he was going after business in a different way, and they shook hands and left the hotel.

Will Combination with Beauty Shop



A lady getting a marcel in this beauty shop, which has leased space in a filling station

HOW much gasoline and oil business will a marcel attract? How much more greasing work will an eyebrow arch or "facial" bring? Will clay packs and manicures be trade-pullers at filling stations for women drivers?

Will men drive in increasing numbers to a filling station because there's a handy place next door to leave their suits to be cleaned and pressed?

Answers to these questions may be forthcoming when the Service Sisters, East 89th St. and Euclid Ave., Cleveland, have had an opportunity to give their beauty shop and dry cleaning establishment, recently opened in "Doc" Wyant's filling station, a fair trial.

The novelty of a beauty parlor and dry cleaning shop on the same lot with a filling station may in itself attract customers to this spot, but the convenience of being able to park a car on the lot, free of charge, while shopping there, is expected to prove the strongest attraction, the proprietors believe.

Women drivers particularly will recognize this convenience, in the opinion of Mrs. Myrtle Reichert, proprietor of the beauty shop. A woman can stop there for a shampoo, marcel, manicure or any kind of beauty work, while she leaves her car with the filling station man for greasing and oiling, thus getting two chores done at the same time. Or she can merely park the car there.

"We chose this filling station location for our business," Mrs. Reichert said, "because we believe women drivers will like the convenience of driving into the station, and being able to leave their cars here without fear of one-hour parking laws, while they are having their hair marceled, their hands manicured, or any other kind of beauty work done.

"Very little of the work we do here could be done at any shop within the law's limitation of one hour for parking, when you take into consideration that it takes time to get into a building, once you have found a place to park, go up in an elevator and then perhaps wait a few minutes until they are ready to take you in your down-town shop.

"Traffic congestion, and parking the car in a parking space at 25 to 35 cents many blocks away from the shopping district, to get to a centrally-located beauty shop, cleaner or fur repair store, are irritating nuisances to most women drivers. By having such work done here, and their cars attended to simultaneously, they will be making only one stop instead of three or four in various parts of town. They will leave here ready for the day's shopping, luncheon engagements, bridge, or whatever appointments they may have."

This applies, of course, mostly to women drivers who are housewives, who drive in from the city's eastern residential districts on their way down town. The station is on Euclid Ave., Cleveland's main thoroughfare, and is about four miles out of the shopping district where traffic, of course, forbids convenient parking. The drives into the station are spacious, making it easy of approach.

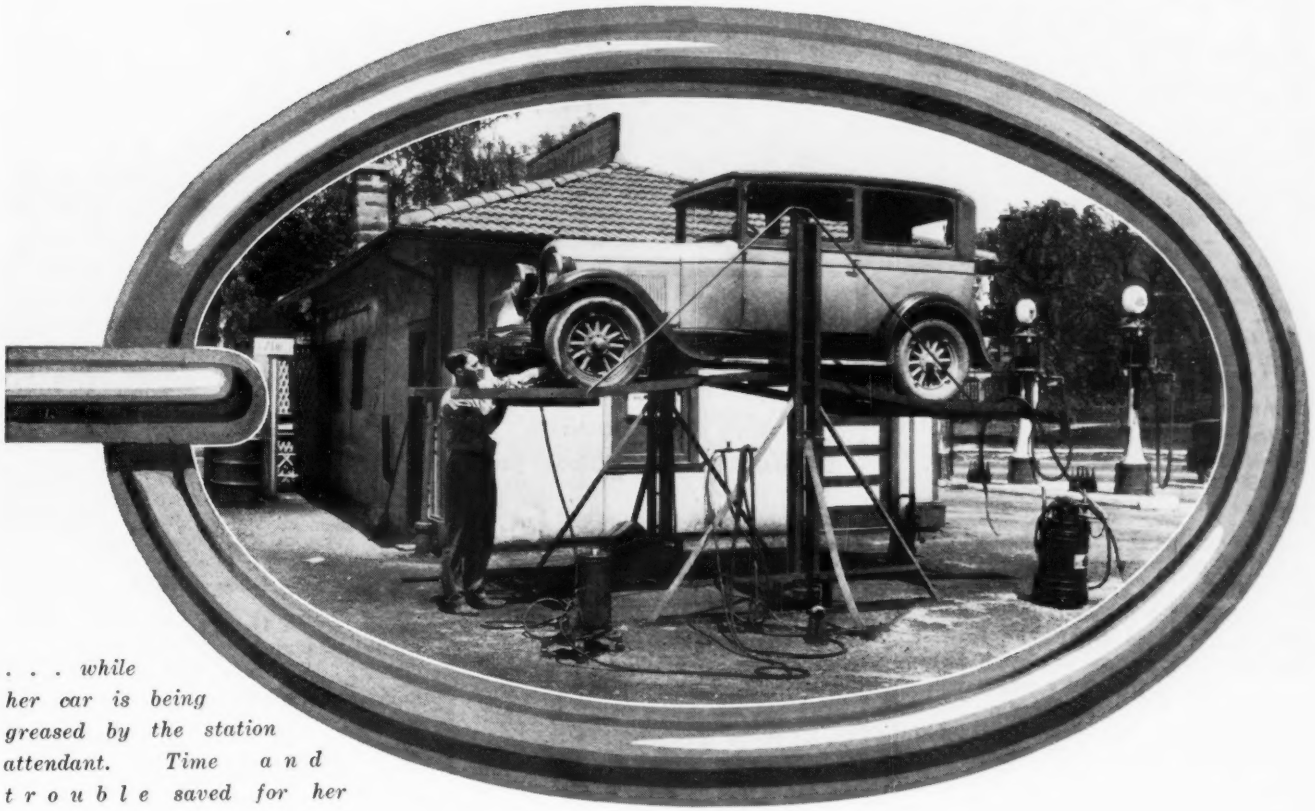
Mrs. Marie Davis, the other "Service" sister, who handles the cleaning, pressing and repairing service, said she believed this location an advantageous one for her work in connection with the filling station. The station is in the higher class apartment district where the majority of people are of the salaried class who have much of their personal work done away from home. It is convenient for them to stop in on their way to or from work to drop their garments there for cleaning or repair work.

The same ideas are shared by Burt Zimmerman, manager of the Columbia Refining Co., Cleveland, which owns the station. That company has been putting up stations of this sort in the past where a part of the station is devoted to the sale of petroleum products and another part to some other enterprise. It has leased out space to such businesses as dry cleaning and delicatessen shops, believing that the unusual is a drawing card for gasoline customers.

On the beauty shop in connection with this filling station, Mr. Zimmerman says:

"Ladies come in to get their hair

Pull Women Motorists to Station?



. . . while her car is being greased by the station attendant. Time and trouble saved for her

marceled, shampooed, finger waved, 'permanented'; to get facials, manicures, etc., and while this dolling up process is going on, there is ample time and reason to doll up their cars likewise with gasoline, oil, grease, etc.

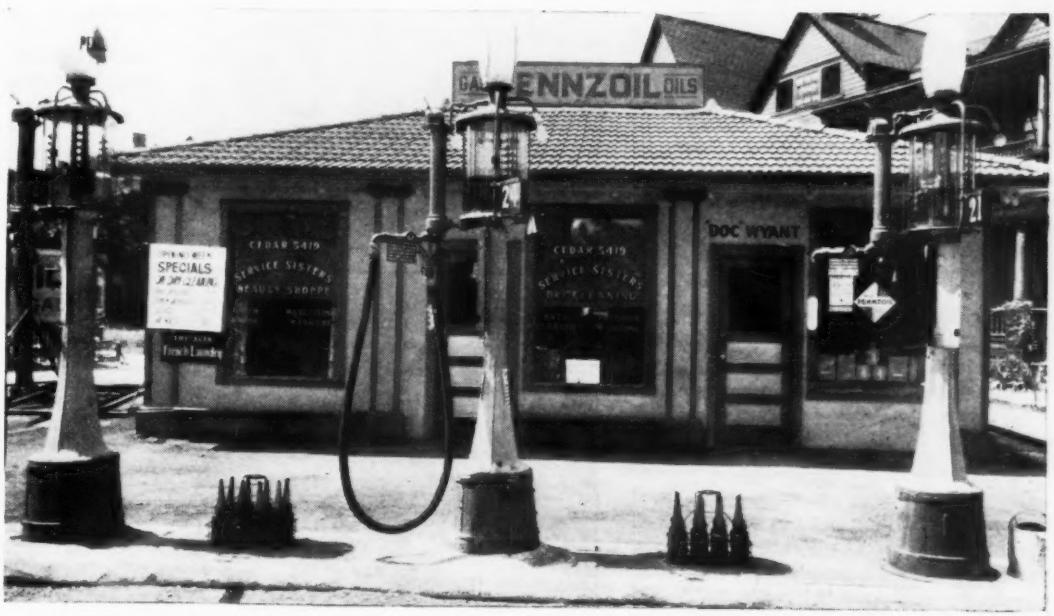
"Any drawing card, which is different or unusual, serves for and makes for more attractiveness and advertisement. We believe that any properly conducted enterprise will bring in business to the gasoline station, particularly when it is a business catering to the ladies. Naturally, business is obtained by solicitation and salesmanship, and in a gas station politeness, courtesy and service, especially where the ladies are concerned, is a business-maker."

W. O. "Doc" Wyant leases the filling station part of the Euclid Ave. establishment and the Service Sisters the other part of it. These are, however, run as separate businesses and have no connection with each other.

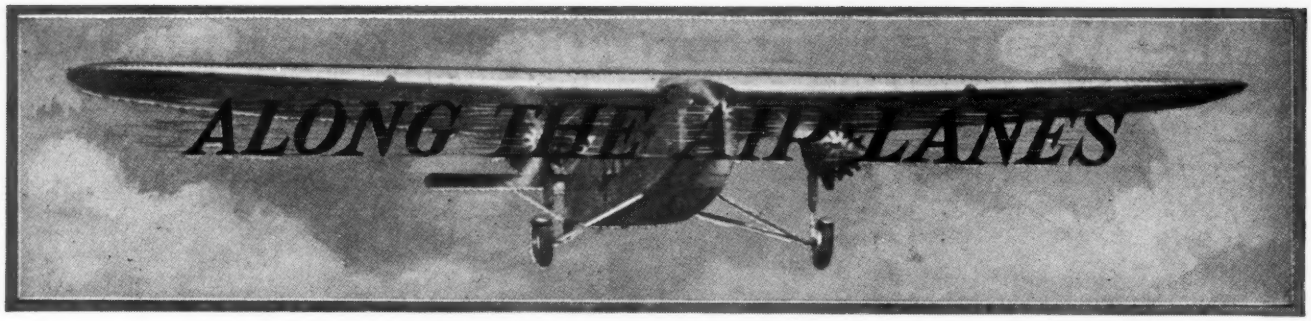
Mr. Wyant said he saw the possibilities of increased business from this unusual combination. His views coincided with those of the beauty shop proprietors on the convenience of a one-stop where three or four stops would be necessary otherwise.

The station is equipped with three gasoline pumps and one hydraulic lift for greasing and oiling work. A large space for free parking is reserved at the side and back of the lot.

While the beauty and dry cleaning shop in connection with a filling station may not be entirely new in some parts of the country, it is at least unique in a city.



A double-compartment service station owned by the Columbia Refining Co., Cleveland, in which "Doc" Wyant conducts a gasoline and oil business at the right, while dry cleaning, pressing, dyeing and laundry work, finger waving, shampooing, marceling, etc., are done at the left



MORE than 100,000 miles have been flown by airplanes of the Union Oil Co. of California, Los Angeles, since the acquisition of the first one in April, 1928. A new Travelair biplane has just been added. This plane, carrying two passengers and a pilot, is powered with the new 300 horsepower Wright J-6 motor and has a speed of 160 miles per hour.

The new plane was flown from Detroit to Los Angeles by Roy Harding, central division representative of the company. It was then flown back to Cleveland piloted by C. F. Lienesch, head of the company's aviation department, covering the route which will be followed by the contestants in the Women's Air Derby from Santa Monica, Cal. to Cleveland, which starts Aug. 18.

E. F. Schlee, president of Schlee-Brock Aircraft Corp., Detroit, globe-girdler by air, is recovering from an accident at an airport. Mr. Schlee had inadvertently stepped into the path of a revolving propeller and was cut on the back of his head and on his left arm. He was expected to be back at the office, however, within a short time. Mr. Schlee was formerly president of the Wayco Oil Corp., Detroit, acquired by the Paragon Refining Co., Toledo, O.

The use of modern transportation to bring the eastern source of supply in close contact with the western markets was clearly demonstrated recently by P. M. Pike, chairman of the board of the Republic Supply Co. of California, Los Angeles.

Mr. Pike and party traveled by combination train and plane to Youngstown, O. at an average speed of 70 miles per hour, consuming a total of 40 hours instead of the customary 65 hours by rail only.

Control of Sikorsky Aviation Corp., manufacturer of the Pratt & Whitney powered Sikorsky amphibian, has been acquired by United Aircraft & Transport Corp., according to the July 27 issue of "Aviation." It is understood that the transaction involved between $5,000,000 and $10,000,000.

NATIONAL Air Races and Aeronautical Exposition, Cleveland, O., Aug. 24 to Sept. 2.

High points of exposition:

Air derbies from various parts of the country.

International air derby.

First national air derby for ladies.

Blimp races—Glider exhibitions.

Night flying exhibitions.

Parachute jumping contests.

Huge flower parade.

$100,000 in cash prizes—valuable trophies.

Nation's greatest flyers, and Army, Navy, and Marine flyers will participate.

A box for eight people has been reserved by the Columbia Refining Co., Cleveland, for the 1929 national air races and aeronautical exposition which will be held in Cleveland Aug. 24 to Sept. 2, according to Burt Zimmerman, manager.

That company says that Pennzoil, which it distributes, will be used in many of the races and events at this exposition. The Stewart Aircraft Corp., which sponsored the flight of the "City of Cleveland," short-time endurance record holder, has ordered five barrels of Pennzoil aircraft oil. Other companies ordering it are the United States Airlines, Thompson Aeronautical Corp., and Dungan Airways, of Cleveland.

BEFORE the National Air Races take place in Cleveland Aug. 24, the Standard Oil Co. of Ohio plans to have the roofs of its bulk plants in 272 cities in Ohio marked with the name of the town for guidance of aviators.

In the smaller towns letters 45 inches high will be used. In larger cities signs from six to 10 feet high will be erected according to a recent announcement.

Warren E. Carey, southern California representative of the Union Oil Co. of California, and D. A. Cain, aviation lubrication engineer of the company, left Los Angeles on July 24 in one of the company planes to fly over the air mail, passenger and express route that opened on Aug. 1 between Los Angeles and Mexico City. This line was opened by the Latin American Air Transport Co.

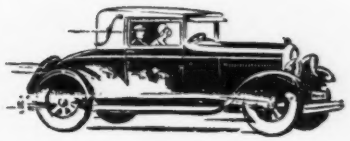
These Union Oil representatives will cover the complete route which is planned eventually to extend to Panama, making arrangements incident to servicing of the 10-passenger and mail planes at various cities along the line.

In an endeavor to promote aviation in Canada, the Imperial Oil, Ltd., Toronto, recently presented the Aviation League of Canada with a Gypsy Moth light airplane. Victor Ross, vice president of the Imperial, presented the plane on behalf of his company, to Major-General J. H. MacBrien, president of the league, upon the occasion of the opening of the municipal airport at Hamilton, Ont.

Here's how oil companies can help the cause of aviation by painting on the roofs of their buildings the name of the nearest airport. The Texas Co. is doing that with its vacuum plant in the Flat Rock section of the Bird Creek area, north of Tulsa

New Stations Building

Ft. Worth, Tex.—Humble Oil & Refining Co., filling station.
Independence, Ia.—Shell Petroleum Corp., filling station.
Houston, Tex.—A. H. Eicke, filling station.
Indianapolis, Ind.—Philfuels Co., distributing station.
Capac, Mich.—Sperry's Garage, filling station.
Pueblo, Col.—Pueblo Gas & Fuel Co., distributing station.
Austin, Tex.—Magnolia Petroleum Co., filling station.
Athens, Ga.—Wofford Oil Co., filling station.
Huntington, W. Va.—Watco Co., filling station.
San Antonio, Tex.—Grayburg Oil Co., filling station.
Karnes City, Tex.—W. C. Bodden, filling station.
Lake Charles, La.—Louisiana Oil Refining Corp., filling station.
Jefferson City, Mo.—Shell Petroleum Corp., filling station.
Charlotte, N. C.—Automobile Service Co., filling station.
Kingsport, Tenn.—W. A. Allen, filling station.
Austin, Tex.—W. E. McCaleb, filling station.
Macon, Ga.—Bibb Tire Co., filling station.
Pueblo, Col.—Sinclair Refining Co., filling station.
Pequot, Minn.—B. O. Hoff, service station.
Eagle Grove, Ia.—Mid-Continent Petroleum Corp., filling station.
Hutchinson, Kan.—Sam Schneider Oil Co., filling station.
Enid, Okla.—The Texas Co., filling station.
West Plains, Mo.—Pierce Petroleum Corp., Service station.
North Platte, Neb.—Standard Oil Co., filling station.
Lanesboro, Minn.—Standard Oil Co., filling station.
Stafford, Kan.—R. Enns & P. R. Lawrence, service station.
Drumright, Okla.—S. S. Ferguson, filling station.
Anamosa, Ia.—Jones County Oil Co., service station.
Kansas City, Mo.—Western Oil Refining Co., filling station.
St. James, Mo.—Thos. Biles, service station.
Webb City, Mo.—Cities Service Co., filling station.
Marlow, Okla.—L. J. Garland, filling station.
Windsor, Col.—C. J. McReynolds, filling station.
Ft. Smith, Ark.—Gulf Refining Co., bulk station.
Newton, Kan.—C. E. Hedrick, service station.
Pueblo, Col.—DeWitt Motor Co., filling station.
Pueblo, Col.—Continental Oil Co., filling station.
Houston, Tex.—Humble Oil & Refining Co., filling station.
Memphis, Mo.—A. W. Tippett, filling station.
Grand Forks, N. D.—Grand Forks Automobile Dealers Co., service station.
Cedar Falls, Ia.—W. S. Raymond, filling station.
Cedar Falls, Ia.—F. H. Weisbard, filling station.
Gassville, Ark.—Isaac Coventon, filling station.
Burlington, Kan.—Shell Petroleum Corp., bulk station.
Charleston, Ark.—John Bollinger, filling station.
Grand Forks, N. D.—J. W. Lyons, filling station.
Brunswick, Ga.—Standard Oil Co., two filling stations.
Wilmington, N. C.—Gulf Refining Co., filling station.
Charlotte, N. C.—Joe Garibaldi, service station.
Minneapolis, Minn.—A. L. Stanchfield, filling station.
Fargo, N. D.—E. C. Harper, filling station.
Grinnell, Ia.—W. M. Kaloupek, filling station.
Leon, Ia.—Standard Oil Co., filling station.
Billings, Mont.—C. H. Mitchell, filling station.
Martinsville, Ind.—Ralph Martin, service station.
Rochester, Ind.—Polk Oil Co., filling station.
Salem, Ind.—Lewis Jones, filling station.
Butte, Mont.—Shell Oil Co., bulk station.
Nebraska City, Neb.—The Texas Co., filling station.
Slayton, Minn.—Sinclair Refining Co., bulk station.
Oakwood, Tex.—Gulf Refining Co., bulk station.
Boyne, City, Mich.—J. N. Hale, filling station.
Somerset, Ky.—J. H. Spradlin, filling station.
Billings, Mont.—P. O. Nilson, filling station.

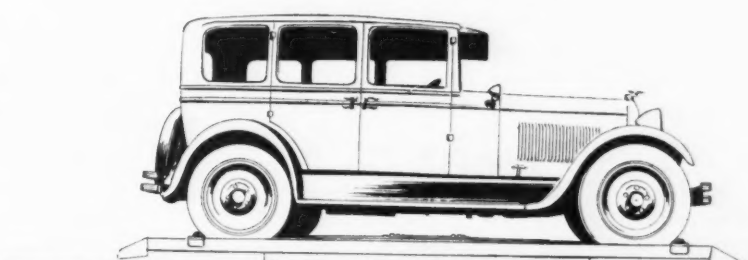
Stop  that car! -it needs greasing

HAVE you ever figured how many cars pass your place every hour of every day that are much in need of greasing service? Enough to double and treble your profits. What are you doing to stop them? An Ottawa Lift will remind many to stop. One Ottawa owner reported 600% increase in greasing jobs in just this way in 60 days!

Let us tell you all about the Ottawa and show you why it is the best Lift obtainable anywhere. Thirty years of manufacturing experience are behind it. Nothing to go wrong or wear out—will last a lifetime. Full hydraulic, oil supported, safe and simple to operate on your air compressor. Supplied in both free wheel and drive-on types.

Write for complete details today

"Grease business doubled in 60 days"—say Ottawa Lift owners.



OTTAWA LIFT

OTTAWA MFG. COMPANY
224 Fuller Street Ottawa, Kansas

OIL PRICE HANDBOOKS

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The OIL PRICE HANDBOOK is the only complete record of oil markets for a whole year, compiled in one handy volume for quick reference. Cloth bound—marginal index—9" x 6"—146 pages.

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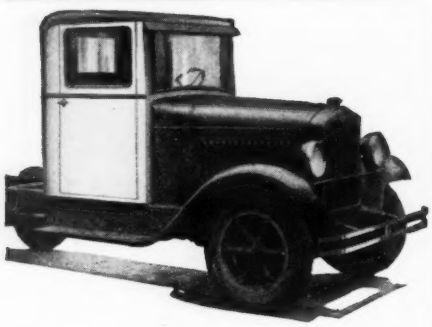
National Petroleum News, 735 Penton Bldg., Cleveland, Ohio



End your cab troubles by specifying Highland Cabs with Rocker Sill Mounting for all your trucks.

Above is the new Coupe Cab with cadet type visor—a smart looking cab for smart trucks.

Highland Cabs are made in four styles to fit every make and size of truck and type of service. See the Highland distributor near you or write for full information direct.

The Highland Body Manufacturing Company
430 Elmwood Place, Cincinnati, Ohio

HIGHLAND
FOR CABS

All-in-One-Folio

Your Name in Gold FREE

$25.00

Folio opens out to full Display

361—This Folio is substantially made from heavy, smooth, 5-oz. black cowhide. No flaps—Solid ends. Opens out for full display. Contains eighteen 4-oz. bottles with metal capped corks. Bottles partitioned separately. Case also contains six 1-oz. squat grease jars. Plenty of room for literature and order blanks.

Less 10% for Cash
Other styles in our FREE Catalog

L-U-C-E

Builders of Sales Luggage
614 Delaware, KANSAS CITY, MO.

ON THE LAZY BENCH

National Petroleum News

HE TOOK NO CHANCES, BUT—

He brushed his teeth twice a day with a nationally advertised toothpaste.

The doctor examined him twice a year.

He wore his rubbers when it rained.

He slept with the windows open.

He stuck to a diet with plenty of fresh vegetables.

He relinquished his tonsils, and traded in several worn-out glands.

He golfed—but never more than 18 holes at a time.

He got at least eight hours sleep every night.

He never smoked, drank or lost his temper.

He did his daily dozen daily.

He was all set to live to be a hundred.

The funeral will be held next Wednesday. He is survived by eighteen specialists, four health institutes, six gymnasiums, and numerous manufacturers of health foods and antiseptics.

HE HAD FORGOTTEN ABOUT TRAINS AT GRADE CROSSINGS.

—N.I.O.M.A. Bulletin

* * *

"Oh, Mamma, look at the quaint, old-fashioned girl."

"Yes, dear."

"But, Mamma, what are those funny seams running up the back of her legs?"

"S-s-sh, dear, be quiet. She wears stockings."

—Field Flashes

* * *

Like Father, Like Son

Johnny (asking for third helping of potatoes)—"Mother, pass the potatoes!"

Mother—"Johnny, you're a little pig."

Dad—"Johnny, you know what a pig is, don't you?"

Johnny—"Sure! A pig is a hog's little boy."

—Pure Oil News

* * *

Did you ever hear of the lazy man who put coffee grounds in his mustache and drank hot water so he wouldn't have to make coffee?

—Barnsdall

* * *

Judge: "Why did you steal the watch?"

Pitter: "I was going along, I saw that the watch was going and I thought, 'Why can't we go together'?"

—Skelly News

* * *

"I feel terrible. I think I'm dying."

"Well, you can't die here, this is the living room."

—Harvester World

This One Is Terrible

Teacher—What are the games and sports of Mexico?

Mike—Bull fightin' and golf.

Teacher—Dear me, golf isn't a Mexican game.

Mike—Why, ain't you ever heard of de golf of Mexico?

—Pure Oil News

* * *

"I wish to select a birthday present for my husband and can't think of anything. He doesn't smoke, nor drink, nor play cards."

"Is he fond of fancy work?"

—Skelly News

* * *

Foul Ball

The village choir-boys had decided to form a cricket team, and appointed their junior member honorary secretary.

In due course the youngster appealed to the curate for support.

This is how his letter ended:—

"And we should be very pleased, sir, if you would allow us the use of the bats which the choir-men say you have in the belfry!"

—Harvester World

* * *

Little Mary: Nurse, will I ever have a mustache on my lip like daddy, when I grow up?

Nurse: Pretty often, dear, I expect!

* * *

Helen: What are you knitting?

Alice: Something to cheer up the boys.

Helen: Why, the war was over long ago.

Alice: This is a bathing suit for me, my dear.

* * *

Kid: "How did you get the red marks on your nose, uncle?"

Uncle: "Glasses, my boy!"

Kid: "Glasses of what?"

—Field Flashes

* * *

Before And After

Before marriage a man yearns for a woman, and after marriage the "y" is silent.

—Pure Oil News

* * *

"Ah regahds chickuns as our most usefullest animals," said old Uncle Rastus. "You can eat 'em befor' dey is born and aftah dey is daid."

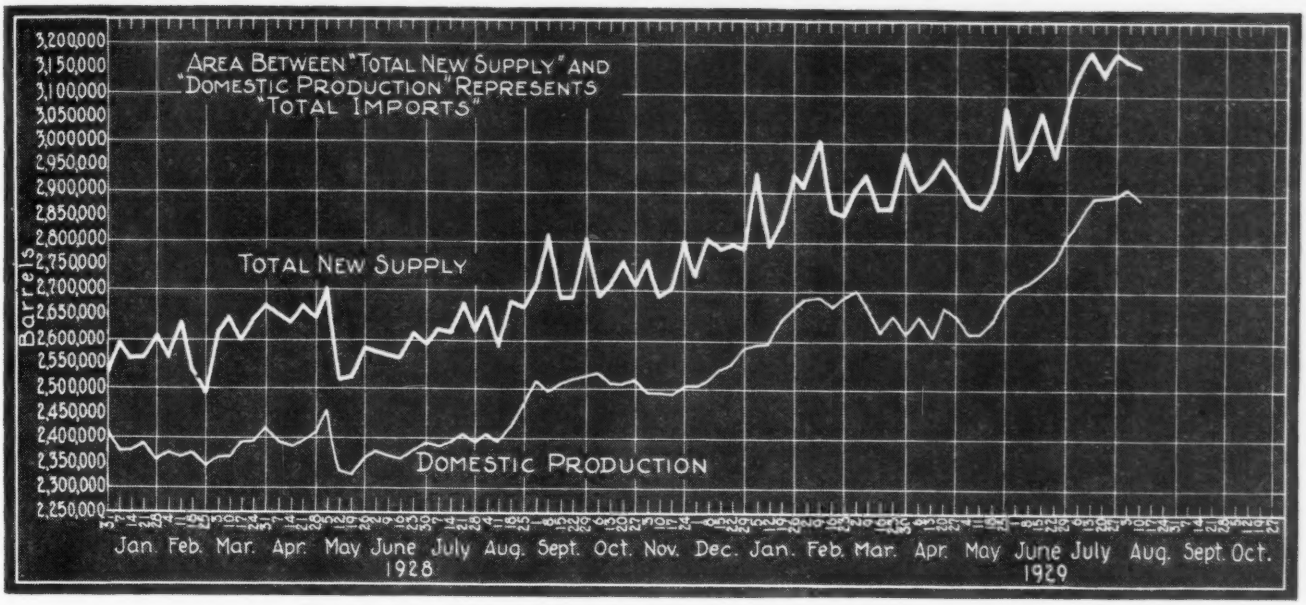
—Barnsdall

* * *

Nowadays, nobody cares how bad your English is so long as your Scotch is good.

—Pure Oil News

Daily Average Crude Oil Production and Imports



Daily average gross output of United States, by fields, for week ending with dates below as compiled by American Petroleum Institute

PRODUCTION SUMMARY

	Aug. 10	Aug. 3
Production east of Rockies	2,042,800	2,046,300
Decrease		3,500
Total production in U. S.	2,896,000	2,908,600
Decrease		12,600
Crude oil imports	256,571	249,285
Increase		7,286
Total crude supply	3,152,571	3,157,885
Decrease		5,314

OKLAHOMA

	Aug. 10	Aug. 3
Allen Dome	25,200	24,350
Asher	11,200	11,350
Blackwell	3,800	3,800
Bowlegs	33,550	34,250
Braman	3,950	3,950
Bristow-Slick	20,800	21,000
Burbank	18,950	19,350
Carr City	13,150	13,850
Cromwell	8,000	8,000
Cushing	18,500	18,500
Davenport	1,400	1,350
Duncan District	7,450	7,450
Earlsboro	81,750	82,500
East Seminole	4,900	5,100
Fox	1,400	1,400
Garber	5,700	5,650
Graham	4,300	4,350
Healdton	13,150	13,100
Hewitt	7,850	7,850
Hubbard	1,800	1,700
Little River	79,150	77,300
Logan County	21,000	23,850
Maud	13,000	12,750
Mission	28,500	30,150
North Okmulgee	12,650	12,700
Oklahoma City	32,950	30,500
Osage (outside Burbank)	26,400	26,350
Papoose	3,250	3,250
Pearson	1,200	1,200
St. Louis	70,400	73,850
Scholem-Alechem	12,700	12,700
Searight	12,100	11,400
Seminole	33,250	34,000
South Okmulgee	8,300	8,300
Thomas	850	850
Tonkawa	9,200	9,300
Wewoka	4,650	4,700
Yale-Jennings	7,050	7,050
Others	61,000	61,000
Total, Oklahoma	724,400	730,050
Decrease		5,650

KANSAS

Augusta-Fox Bush	3,100	3,100
Churchill	7,200	7,250
Eldorado-Towanda	13,050	13,050
Florence-Covert	950	950
Greenwood County	20,400	20,500
Oxford	4,300	4,350
Peabody-Elbing	4,100	3,350
Rainbow Bend	1,050	1,050
Russell	3,200	3,100
Sedgwick County	36,350	35,650
Others	34,500	34,300
Total, Kansas	128,200	126,650
Increase		1,550

NORTH LOUISIANA

Bellevue	650	600
Caddo, light	9,350	9,200
Caddo, heavy	3,300	3,350
Cotton Valley	2,400	2,500
De Soto and Red River	3,650	3,650
Elm Grove	500	550
Haynesville	5,050	4,850
Homer	3,900	3,850
Pleasant Hill	550	500
Urania	6,400	6,400
Others	250	250
Total, North Louisiana	36,000	35,700
Increase		300

ARKANSAS

Champagnolle	7,050	7,050
El Dorado	4,600	4,600
Lisbon	1,200	1,200
Nevada	1,000	1,000
Smackover, light	6,000	6,100
Smackover, heavy	46,350	46,750
Stephens	1,000	1,000
Others	100	100
Total, Arkansas	67,300	67,800
Decrease		500

East Central Texas

Boggy Creek	2,700	2,800
Corsicana-Powell	7,200	7,350
Currie	400	400
Mexia	5,100	5,250
Nigger Creek	300	300
Richland	350	350
Wortham	900	1,000
Total, East Central Texas	16,950	17,450
Decrease		500

Southwest Texas

Dale	350	400
Laredo District	10,750	11,000
Luling	11,000	11,100
Lytton Springs	950	1,000
Salt Flat	48,250	49,000
Somerset	1,300	1,400
Others	4,800	5,000
Total, Southwest Texas	77,400	78,900
Decrease		1,500
Total, Texas (Outside Gulf Coast)	737,950	733,600
Increase		4,350

TEXAS (Outside Gulf Coast)

Panhandle District

	Aug. 10	Aug. 3
Carson County	9,250	8,300
Gray County	72,500	62,100
Hutchinson County	25,950	25,700
Wheeler County	950	700
Others	1,200	1,100
Total, Panhandle Texas	109,850	97,900
Increase		11,950

North Texas

Archer County	19,000	19,750
Burkburnett	8,650	8,750
Electra	11,600	11,800
Iowa Park and K. M. A.	4,400	4,600
Montague-Cooke	14,850	12,900
Wilbarger	29,150	28,750
Others	700	750
Total, North Texas	88,350	87,300
Increase		1,050

West Central Texas

Brown County	7,800	7,900
Callahan County	4,200	4,250
Coleman County	5,800	6,000
Eastland-Desdemona	7,200	7,400
Jack County	3,300	3,100
Palo Pinto County	350	350
Shackelford County	10,800	11,000
Stephens County	6,800	6,850
Throckmorton County	700	800
Young County	10,250	10,700
Others	700	700
Total, West Central Texas	57,900	59,050
Decrease		1,150

West Texas

Crane and Upton Counties	45,300	45,600
Crockett County	2,000	2,000
Howard County	40,000	41,400
Jones County	3,300	3,400
Mitchell and Scurry Counties	2,600	2,600
Pecos County	135,000	138,000
Reagan County	17,800	17,900
Winkler County	140,000	140,300
Others	1,500	1,400
Total, West Texas	387,500	393,000
Decrease		5,500

GULF COAST

Coastal Texas

Barbers Hill	13,700	11,600
Batson	1,300	1,300
Big Creek	3,250	2,900
Blue Ridge	2,800	2,950
Boling	1,500	1,400
Damon Mound	600	600
Goose Creek	5,550	5,750
Hull	8,000	7,950
Humble	5,900	5,300
Orange County	2,800	2,750
Pierce Junction	16,500	19,700
Raccoon Bend	7,900	7,650
Saratoga	950	950
Somerville	2,500	2,250
Sour Lake	2,700	2,700
South Liberty	5,700	6,400
Spindletop	25,100	27,100
Sugarland	11,400	11,900
West Columbia	6,300	6,200
Others	4,200	4,400
Total, Coastal Texas	128,650	131,750
Decrease		3,100

Coastal Louisiana

East Hackberry	2,400	2,500
Edgerly	750	700
Evangeline	2,300	2,300
Lockport	3,500	3,100
Old Hackberry	1,900	2,100
Sorrento Dome	200	200
Sulphur Dome	3,300	3,500
Sweet Lake	50	50
Vinton	4,200	4,400
Others	1,600	1,300
Total, Coastal Louisiana	20,200	20,150
Increase		50
Total Gulf Coast	148,850	151,900
Decrease		3,100

ROCKY MOUNTAIN

Wyoming

Big Muddy	2,300	2,300
Elk Basin	800	800
Grass Creek	2,150	2,300
Labarge	2,350	2,200
Lance Creek	200	250
Lost Soldier	3,900	4,150
Oregon Basin	5,900	4,950
Rock Creek	2,450	2,400
Salt Creek	30,250	31,100
Others	3,800	3,950
Total, Wyoming	54,100	54,400
Decrease		300

Montana

Cat Creek	1,450	1,400
Pondera	3,000	2,950
Sunburst	6,950	6,950
Others	100	100
Total, Montana	11,500	11,400
Increase		100

Colorado

Florence	900	850
Fort Collins	2,450	2,500
Moffat (Craig)	1,100	1,250
Others	2,300	2,200
Total, Colorado	6,750	6,800
Decrease		50

New Mexico

Artesia	850	850
Hogback	100	100
Rattlesnake	1,250	1,500
Others	450	450
Total, New Mexico	2,650	2,900
Decrease		250
Total, Rocky Mountain	75,000	75,500
Decrease		500

CALIFORNIA

Dominguez	10,000	10,000
Elwood-Goleta	23,500	26,000
Huntington Beach	44,500	43,500
Inglewood	23,500	23,500
Kettleman Hills	4,000	4,000
Long Beach	169,000	170,000
Midway-Sunset	68,500	67,000
Rosecrans	6,600	6,700
Santa Fe Springs	260,000	268,000
Seal Beach	47,500	48,000
Torrance	12,600	12,600
Ventura Avenue	57,000	56,500
Others	126,500	126,500
Total, California	853,200	862,300
Decrease		9,100

EASTERN

(Including Ill., Ind., Ky., O., W. Va., Pa., and N. Y.)	125,100	125,100

Compilation Of Mid-Continent Refinery Operations

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National Petroleum News

Mid-Continent Refinery Operations Week Ended August 9 (By Telegraph)

	Kansas	Oklahoma	North & Cent. Texas	West Texas	North La.-Ark.	Total Week Ended Aug. 9
Plants Reporting	12	29	25	15	12	93
Da. Av. Cap. (Bbls.)	92,000	160,200	86,600	81,500	54,900	475,200
Da. Cracking Capacity	30,700	52,600	17,200	5,000	22,700	128,200
Da. Av. Crude Runs	68,368 — 1.2	114,591 + 5.9	58,084 — 5.7	44,553 — 5.7	51,619 — 8.7	337,215 — 2.2
Da Av. Other Oils	11,239 + 88.4	9,814 — 28.5	1,784 — 63.3	1,611 — 65.2	3,933 + 33.5	28,381 — 11.7
GASOLINE—Gallons						
Stocks, Aug. 2	19,752,000	64,159,000	15,914,000	8,026,000	13,806,000	121,657,000
Prod. 8-2 to 8-9	11,596,000 + 5.1	18,718,000 + 5.5	6,854,000 — 13.4	3,637,000 — 12.6	5,479,000 — 2.1	46,284,000 — 0.4
Ship. 8-2 to 8-9	12,145,000 — 9.1	19,383,000 — 7.4	7,856,000 — 6.5	4,437,000 + 46.9	6,873,000 — 2.2	50,694,000 — 3.9
Stocks, Aug. 9	19,203,000 — 2.8	63,494,000 — 1.0	14,912,000 — 6.3	7,226,000 — 10.0	12,412,000 — 10.1	117,247,000 — 3.6
Ratio Sales to Prod.	104.7%	103.5%	114.6%	121.9%	125.4%	109.5%
KEROSENE—Gallons						
Stocks, Aug. 2	7,778,000	6,104,000	2,338,000	29,000	948,000	17,197,000
Prod. 8-2 to 8-9	2,202,000 — 6.7	2,316,000 + 4.7	1,383,000 — 14.2	23,000 + 21.1	199,000 + 16.4	6,123,000 — 4.0
Ship. 8-2 to 8-9	2,688,000 — 5.5	2,555,000 + 4.1	1,533,000 — 61.5	2,000 — 83.3	282,000 — 30.9	7,060,000 — 8.0
Stocks, Aug. 9	7,292,000 — 6.2	5,865,000 — 3.9	2,188,000 — 6.4	50,000 + 72.4	865,000 — 8.8	16,260,000 — 5.4
Ratio Sales to Prod.	122.1%	110.3%	110.8%	8.7%	141.7%	115.3%
STOVE DISTILLATE—Gallons						
Stocks, Aug. 2	1,910,000	5,840,000	891,000	85,000	41,000	8,767,000
Prod. 8-2 to 8-9	313,000 + 38.4	697,000 + 21.2	126,000 — 54.8	43,000 — 45.6	161,000 + 93.9	1,340,000 + 7.8
Ship. 8-2 to 8-9	257,000 — 49.7	620,000 + 8.6	152,000 — 20.0	69,000 + 18.9	168,000 + 36.6	1,266,000 — 12.9
Stocks, Aug. 9	1,966,000 + 2.9	5,917,000 + 1.3	865,000 — 20.9	59,000 — 30.6	34,000 — 17.1	8,841,000 + 0.8
Ratio Sales to Prod.	82.1%	89.0%	120.6%	160.5%	104.3%	94.5%
GAS OIL—Gallons						
Stocks, Aug. 2	9,781,000	31,051,000	3,745,000	11,225,000	7,721,000	63,523,000
Prod. 8-2 to 8-9	1,692,000 — 5.2	2,445,000 — 19.4	1,145,000 — 56.6	203,000 — 29 5	1,875,000 — 4.4	7,360,000 — 24.2
Ship. 8-2 to 8-9	2,064,000 — 34.6	1,569,000 — 45.3	1,113,000 — 62.6	806,000 — 4.8	2,375,000 + 4.1	7,927,000 — 34.6
Stocks, Aug. 9	9,409,000 — 3.8	31,927,000 + 2.8	3,777,000 + 0.8	10,622,000 — 5.4	7,221,000 — 6.3	62,956,000 — 0.9
Ratio Sales to Prod.	121.9%	64.2%	97.2%	397.0%	126.6%	107.7%
FUEL OIL—Gallons						
Stocks, Aug. 2	15,003,000	58,927,000	53,977,000	31,038,000	27,018,000	185,963,000
Prod. 8-2 to 8-9	6,812,000 + 3.5	6,796,000 + 11.3	6,909,000 — 3.2	6,815,000 — 18.5	7,063,000 — 9.1	34,395,000 — 4.3
Ship. 8-2 to 8-9	5,891,000 — 1.5	8,329,000 + 13.4	6,305,000 + 4.9	8,188,000 + 35.5	7,346,000 — 9.5	36,059,000 + 7.7
Stocks, Aug. 9	15,924,000 + 6.1	57,394,000 — 2.6	54,581,000 + 1.1	29,665,000 — 4.4	26,735,000 — 10.0	184,299,000 — 0.9
Ratio Sales to Prod.	86.5%	122.5%	91.3%	120.1%	104.0%	104.8%

Gasoline Produced by Various Methods, Week Ended August 9

	Kansas	% of Total	Oklahoma	% of Total	North & Cent. Texas	% of Total	West Texas	% of Total	Louisiana-Arkansas	% of Total	Total	% of Total
Straight Run	7,372,000	63.6	12,699,000	67.8	5,478,000	79.9	3,467,000	95.3	2,077,000	37.9	31,093,000	67.2
Cracked	3,792,000	32.7	4,617,000	24.7	922,000	13.5	.....	....	2,867,000	52.3	12,198,000	26.4
Natural	432,000	3.7	1,402,000	7.5	454,000	6.6	170,000	4.7	535,000	9.8	2,993,000	6.4
Total	11,596,000		18,718,000		6,854,000		3,637,000		5,479,000		46,284,000	

+ or — columns are % change over previous week.

Gasoline Stocks Reduced for Sixth Week

Staff Special—By Telegraph
TULSA, Aug. 12

FOR the sixth consecutive week gasoline stocks at the 93 Mid-Continent refineries reporting weekly operations to NATIONAL PETROLEUM NEWS were reduced according to reports for the week ended Aug. 9.

Gasoline stocks for the field as a whole were reduced 4,400,000 gallons, each district sharing in the reduction. Arkansas-Louisiana district showed largest reduction, stocks being reduced 1,400,000 gallons. North Texas was second with a draft of 1,000,000 gallons and West Texas third with a reduction of 800,000 gallons. Stocks in Kansas and Oklahoma were reduced more than 500,000 gallons each.

Crude charges to stills were reduced 7,500 barrels daily average. Oklahoma was the only district to increase crude runs, increase amounting to 5.9 per cent or 6,429 barrels daily average.

Summary for the Month

Production and shipments, all reporting refineries, for four weeks ended Aug. 9. Change in stocks figured from July 12.

GASOLINE

	Gallons
Production	186,672,000
Shipments	207,085,000
Net change in stocks	—20,413,000
Ratio sales to production	110.9%

KEROSENE

	Gallons
Production	25,171,000
Shipments	27,494,000
Net change in stocks	—2,323,000
Ratio sales to production	109.2%

STOVE DISTILLATE

	Gallons
Production	5,008,000
Shipments	4,723,000
Net change in stocks	+285,000
Ratio sales to production	94.3%

GAS OIL

	Gallons
Production	32,228,000
Shipments	32,951,000
Net change in stocks	—723,000
Ratio sales to production	102.2%

FUEL OIL

	Gallons
Production	144,237,000
Shipments	149,427,000
Net change in stocks	—5,190,000
Ratio sales to production	103.6%

Make Plans for Big Four State Jobber Meet

KANSAS CITY, Aug. 10.—The Kansas City Oil Men's Club has begun work in preparation for the annual meeting of the Big Four States Convention of oil jobbers which will be held at Kansas City Oct. 15, 16 and 17. The convention is an annual meeting of jobbers from the states of Iowa, Nebraska, Kansas and Missouri.

The policy of the jobbers is to hold a three day meeting each year for a discussion of problems of the industry. Meetings in the past have not been held in connection with any exhibit of equipment. Registrations last year totaled 725, most of whom were jobbers.

To prepare for the meeting the Kansas City club has appointed committees on finance, entertainment, ladies' entertainment, and publicity. Members of the finance committee are, J. W. Wilson, J. C. Nourse, Wm. Knapp, R. A. Ostertag, R. D. Mering, John Rader, Wm. Atkins, and Homer Smith.

Members of the entertainment committee are, Jim McIlvain, Norman LeBlond, Wm. Knapp, J. E. Wyatt and C. R. Houston. The ladies' entertainment committee consists of J. R. Battenfeld, J. A. Cannon and Lane Dunagin. A. J. Daniel and Roy Spear comprise the publicity committee.

Shaffer Oil to Market Ethyl Gasoline

CHICAGO, Aug. 8.—John L. Gray, vice-president and general manager of the Shaffer Oil & Refining Co. has announced the completion of negotiations between Shaffer Oil and The Ethyl Gasoline Corp. whereby the former company has obtained a contract which licenses it to manufacture and distribute Ethyl gasoline. The product under the contract will be marketed as Kant-Knock Ethyl gasoline and will be distributed in North and South Dakota, Minnesota, Arkansas, Indiana, Illinois, Iowa, Nebraska, Kansas, Missouri, Oklahoma, and Wisconsin.

At the same time, Mr. Gray announced that for the past three weeks on all orders received for shipment, every station in the Deep-Rock organization has been supplied with 60-42 400 end point gasoline. This is the gasoline which in former years has sold at a premium price of 3 cents per gallon over and above the retail price of Deep-Rock gasoline.

The motor oils which Deep-Rock engineers have been experimenting with for the past six months have now been developed and will be marketed at once under the trade name "Certified Deep-Rock Prize Oil."

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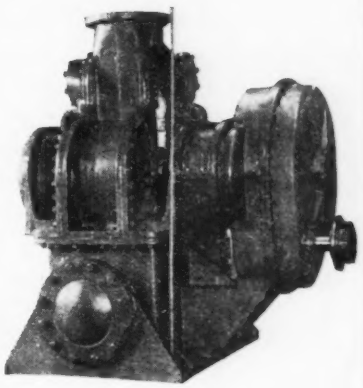

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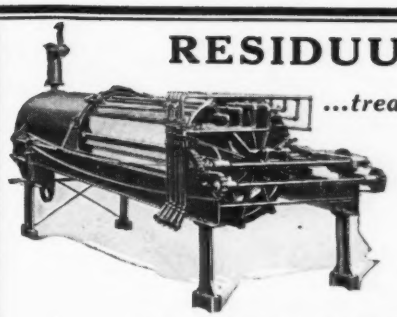

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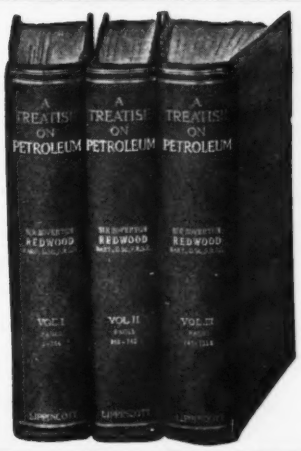

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National Petroleum News

Several Strong Mid-Continent Refiners Advance Gasoline Quotations

Staff Special
TULSA, Aug. 10

FRACTIONAL price advances by several refiners and the tendency on the part of others to make no changes in their quotations placed the Mid-Continent gasoline market in an unsettled position at the close of the week of Aug. 10. Demand continued to be good from the domestic trade and indications were a majority of refiners drew on stocks in the course of the week.

Active buying of natural gasoline boosted prices on all grades. Goods were reported scarce for spot shipment in some quarters.

An export purchase and an active demand from the jobbing trade gave kerosene more strength with slight price advances in some districts.

Distillates were higher in price with demand materially increased. Gas oils were steady in price with demand improved. Fuel oils were generally unchanged. Neutral oils were in lighter demand but bright stock was scarce, and wax showed some improvement in both demand and price.

Gasolines

An unsettled situation developed in the Mid-Continent gasoline market late in the week. Several refiners, especially in Oklahoma, had curtailed crude runs somewhat and had experienced a steady draft on gasoline stocks the past few weeks which gave them considerable storage relief. These refiners on Aug. 8 advanced gasoline prices 0.25 to 0.50 cent a gallon.

Several other refiners in Oklahoma apparently were content to sell their production at price levels established a week or 10 days ago, and a comparatively wide range of quotations was in effect at the close of business Aug. 10. A few refiners continued to quote 7 to 7.25 cents for 58-60 U.S. Motor while a number of the other refiners quoted a minimum of 7.50 cents a gallon.

Competition from other areas continued to have some effect on the Mid-Continent but refiners said they had not encountered as much the past week as they had the previous weeks.

Refiners in Kansas, Louisiana, Arkansas and north Texas were more reluctant to recognize any price increases originating from Oklahoma and while quotations for differential territory shipment were slightly higher in one or two districts at the close of the week, quotations on a group 3 basis were generally unchanged and ranged from 6.875 cents a gallon in West Texas district to around 7.25 to 7.50 cents in Kansas.

Natural Gasolines

Some new buying of natural gasolines developed late in the week. Two buyers sought grades AA and BB. Approximately 500 cars of both grades were bought for immediate and over the month delivery. Part of this purchase was grade AA to move to the Gulf within the next 15 to 20 days. The buying price was reported to have been 6 cents a gallon.

Effect of the buying was reflected in prices at the close of the week. Grade AA moved up to 6.25 cents a gallon. Grade BB prices moved from 5.375 cents to 6 cents before the close of the week. Grade C prices moved along with grade BB.

Kerosenes

Approximately a million gallons of kerosene were bought for export in north Texas at a reported price of 4.75 cents a gallon. This purchase absorbed virtually all the spot kerosene available in that district and prices became more firmly entrenched at levels 0.125 cent higher for domestic movement.

Kerosene was extremely tight in Kansas due to the heavy demand in the farming belt. Many farmers have been harvesting while others have been plowing preparatory to fall planting.

Some of this demand was felt in Oklahoma, along with the buying on the part of many jobbers for the fall demand in the territory further north. While a few refiners quoted around 5.25 cents for 41-43 w.w. grade a majority of others in Oklahoma asked 5.50 cents for their product. The 42-44 w.w. grade was scarce at 5.625 to 5.875 cents a gallon.

The demand for kerosene in Louisiana and Arkansas territory kept pace with production and prices were generally unchanged.

Distillates and Gas Oil

An active demand developed in some quarters for distillates. Kansas refiners particularly felt the increase in both contract and spot order business. One or two refiners in that district had to come into Oklahoma to make purchases to protect contracts.

Some of the demand undoubtedly was caused by jobbers buying for storage while prices were at their summer levels. There apparently has been very little distillate contracting to date. Several refiners said they would play the spot market this winter. A few of them sensed the increase in demand and advanced quotations with the idea of getting what they thought would be price levels later in the summer, or else of storing the goods until those price levels were reached.

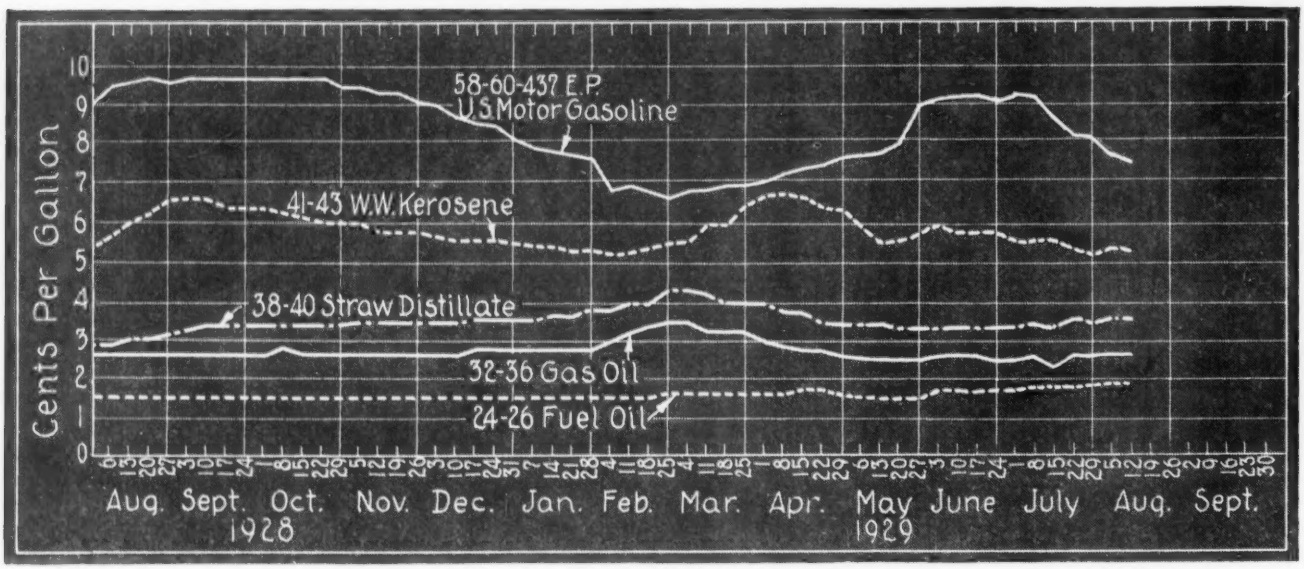
Gas oil demand also was somewhat improved but prices showed no material changes. The low cold test goods were comparatively scarce, several buyers indicated.

Fuel Oils

A few of the higher grades of fuel oil were reported scarcer by several buyers but prices generally were unchanged. Contract shipment to both railroads and industrial consumers was heavy the past week.

The closing down of two or three plants in West Texas has caused more active buying in other districts, some of the buying having been done by marketers who were forced to cover on goods which they had con-

Current Prices of Principal Mid-Continent Refined Products


Cents Per Gallon
58-60-437 E.P. U.S. Motor Gasoline
41-43 W.W. Kerosene
38-40 Straw Distillate
32-36 Gas Oil
24-26 Fuel Oil
Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June July Aug. Sept.
1928
1929

Prices shown are in Group 3 basis and extended to date shown in Refinery Market Tables Section of this issue

tracted to ship and which they had in turn contracted to buy from these plants.

Neutral Oils, Bright Stock

A few grades of neutral oils were in light demand and a few price changes were made but the changes continued to be within the range of general quotations. Bright stock demand was active and goods still scarce. Wax demand showed some improvement with slight advances in prices in some quarters.

S. O. Louisiana Refinery Guards Protect Men

CHICAGO, Aug. 9.—A guard department in a refinery to protect the property and safeguard life has been installed by the Standard Oil Co. of Louisiana, New Orleans.

It is the duty of the guard to keep a sharp lookout for fires, that they may be immediately reported to the fire marshal. He must report any leaking pipe lines, or any condition which appears unsafe, to report at night any lights not burning properly, to prevent violations of the "no smoking" rules, to assist the deputy collector of customs and all federal government agencies in the enforcement of all laws and regulations preventing the smuggling of liquors, drugs, articles of commerce and such things as smugglers smuggle, and generally to look toward the protection of life, laws and property.

This company, in helping its employes to protect their own lives, makes it clear that when an employe finds a hiding place in which to puff his cigarette, he is gambling a smoke against his job. Employes are also told that when a guard holds up a "stop" sign, he does it for the employe's safety and not simply to cause delay. He probably sometimes takes the brunt of the employe's displeasure without comment but he prefers the worker's criticism to that of the widow or other relatives.

RICHMOND, Va., Aug. 9.—The National Oil Co., which recently sold its properties here to the Marland Refining Co., now the Continental Oil Co., is installing 10 storage tanks here at a cost of $26,000 preparatory to its re-entry into the oil business.

Gulf Refining Has Safety Record

CHICAGO, Aug. 9.—Good "no accident" records have been made by 12 units at the Port Arthur, Tex. refinery of the Gulf Refining Co., according to the July "News Letter" of the National Safety Council, Petroleum Section.

Four of the largest departments reported on show these records: tool house department, an average of 10 men, 40 months without a lost-time accident; track department, average of 16 men, 29 months without a lost-time accident; miscellaneous construction, engineers, and so on, average of 200 men, no accident for 29 months; and pressure still department, average of 325 men, 19 months without lost-time case and again six months without lost-time case.

The Gulf company has somewhat of a unique safety organization. Its plant is divided into zones with a safety committee taking charge of the work in each zone. Efficient supervision, careful inspection and adherence to safe practices by employes generally, have resulted in the above good records, according to Mr. Coleman, safety director of the company.

Prices 10 Years Ago
Aug. 11, 1919

	Oklahoma	Penna.
58-60 U. S. Motor	17.50–17.75	20.50–21.00
80-84 Natural	21.00–21.25	.....
Kerosene (41-43 Okla.; 47 w. w. Pa.)	9.25–9.50	11.75
Fuel Oil (24-26 Okla.; 38-40 Pa.)	$0.85	4.75
Crude (Okla. 35-35.9)	$2.25	$4.00
Chicago tank wagon	.....	21.00c

Prices A Year Ago
Aug. 13, 1928

	Oklahoma	Penna.
58-60 U. S. Motor	9.6850c	11.25–11.50c
Grade A Natural	10.75c	.....
Kerosene (Ok. 41-43; Pa. 47 w. w.)	6.00c	7.00–7.25c
Fuel Oil (Ok. 24-26; Pa. 36-40)	$0.65–$0.675	4.75–5.00c
Crude (Ok. 35-35.9)	$1.31	$3.10
Chicago tank wagon	.....	15.00c

Chicago Resale Market

Gasoline Prices Higher; Demand Good

Staff Special

CHICAGO, Aug. 10

GASOLINES showed an unexpected reversal in their price trend late in the week in the Chicago resale market and closed at practically 0.25 cent higher than midweek prices. The principal cause of this change from a bearish to a bullish attitude was the action of the larger refiners in the Oklahoma and Chicago refining centers in advancing their gasoline quotations 0.25 cent.

Prior to this advance the sentiment among the Chicago oil men had been largely toward still lower prices than were prevailing. Most of the marketers had purchased Oklahoma U. S. Motor at 6.75 cents for resale purposes on Aug. 7 and 8, as against 7 cents earlier in the week and were generally expecting lower offers a little later. However, on Aug. 9 practically all of this 6.75-cent goods was withdrawn and on Aug. 10 nearly all the marketers said their buying price was 7 cents and that material was becoming scarce at this figure.

Practically all Oklahoma and Chicago area refiners asked 7.50 cents for U. S. Motor on Aug. 10 and most marketers quoted 7.25 cents. Prices earlier in the week were 7.25 cents by the refiners and 7 to 7.125 cents by marketers. While West Texas gasoline was still available at around 7 cents, Group 3, it was not being offered to the trade in large enough quantities to be much of a factor in the present market.

This advance in gasoline prices marked the first upward movement shown in PLATT'S OILGRAM since about June 8, 1929, when U. S. Motor gasoline out of Kansas and North Texas made its appearance in the Chicago market in large enough quantities to "break" the existing price range of the Oklahoma refiners. Sales of Oklahoma Motor were mostly at 9 to 9.25 cents and most of this "distress" gasoline was offered at 8.75 cents. Spot prices gradually worked lower and on July 8 the major Oklahoma refiners reduced quotations 0.25 cent. These reductions continued at intervals until the low of 7.25 cents was reached early this week.

Contrary to general expectations it appeared that the bulk of the jobbing trade welcomed the present advance in spot gasoline prices. Fears have been general that a cut in service station prices was impending and this advance in spot prices is expected to hold it off.

A careful check of the Chicago trade on Aug. 10 found very few sellers kicking about their gasoline business. Most of them reported their spot sales were "as good as could be expected" and that demand from their jobbers under contract was at maximum proportions. Reports on gasoline consumption continued favorable; most retailers reported a heavy business.

Sentiment on kerosenes was more or less divided. Some sellers asked as low as 5 cents for 41-43 w.w. and said they found no strength in the market. On the other hand, others quoted 5.125 to 5.375 cents and said they expected to obtain higher prices within a short time.

Evidently foreseeing the coming of the winter burner oil season, the distributors were more actively inquiring for these grades of oils. Sales, of course, were not heavy but were improved over past weeks. Sellers reported that the 32-36 straw zero gas oil of low flash was at present almost unobtainable for spot shipment and prices of this grade were higher. High gravity fuel oils were also in steady demand and asking prices were up about 2.5 cents per barrel. Demand for industrial gas and fuel oils continued heavy enough to keep prices at unchanged levels.

Temperatures will continue near normal over most of the Standard of Indiana territory next week. Occasional shower periods are likely.

Industry Is Signing Code of Practices

WASHINGTON, Aug. 12.—A large part of the petroleum industry will subscribe to the code of marketing practices. This is the opinion of those in the Federal Trade Commission who have examined correspondence and signatures to the code which have been received thus far.

Thus far the commission has not announced what companies have signed and no ruling has been made as to whether this information will be made public. The question of such announcement is being considered by M. Markham Flannery, director of the trade practice conference division.

STAUNTON, Va., Aug. 8.—The name of this town has been painted in letters 12 feet high on the roof of the building of the Standard Oil Co. of New Jersey, to guide aviators to the airport which will be built here soon.

Make More Money with FUEL OIL SALES

IF you can make money this year on your fuel oil sales to homes and apartments, you will make more next year and every year. This is the fastest growing field for fuel oil.

You can make money in this business. I have done it with mine and am now helping others to do it. Wouldn't you like to cash in on the experience of others?

I can now work as consultant with a few more concerns—those in the fuel oil business or those thinking of going in. A small expenditure now will get you on the right track and mean more business and greater profits.

W. A. Dalton

Retail Fuel Oil Consultant

1000 Madison St., Gary, Ind.

You Sell 50 Gallons *Instead of* "5"

Turn your "drive in" customers into bulk buyers and get ALL their business. Double and treble your volume of gas and oil sales. Others are doing it. So can you with this new

KWART KWICK

Home Oil Pump

This handy pump fits any drum or barrel. Ideal for home garages, working equally well with oil, gas or other liquids. Nominal in cost—long wearing. Built of finest brass, steel and cast iron. Big discounts to oil companies for quantities.

Distributing one of these pumps with bulk sales is a real way of boosting sales and of tying up with your customers for repeat business. Mail coupon today for descriptive literature.

Kwart Kwick Dep't.
VIKING PUMP COMPANY
Cedar Falls, Ia.

---------- MAIL THIS ----------

Viking Pump Co., Dep't. B.

Please send details and prices on your Kwart Kwick Pump.

Name.....

Town.....

State.....

Refinery Markets on Light Oils and Lubricants

Prices given below are in cents per gallon, F. O. B. refinery except where $ is shown

(These Refinery Prices compiled in the OIL PRICE HANDBOOK for a whole year)

Comparative Prices of 58-60 U. S. Motor Gasoline, 437 E. P., Group 3 and Point of Origin, to Jobbers Only

In Effect August 12

	Price F.O.B. Group 3		*Price F.O.B. Point of Origin*		*If for Particular Destination*
Oklahoma	7.5334	(Wt. Avg.)	7.5334	(Wt. Avg.)	
Kansas	7.25-7.50				S. O. Neb. & Ind. Ter., etc.
Kansas			7.9500	(Wt. Avg.)	Kansas only.
North Texas	7.00-7.25		6.875-7.25		
West Texas	6.875-7.25		6.875-7.25		
Louisiana-Ark.	7.25-7.50				Mich., Ohio & Indiana.
Louisiana-Ark.			7.75		State or differential haul.
Indiana-Illinois	7.50		*		S. O. Ind. territory except Detroit and vicinity. For Ohio on delivered basis only.

*Shipments made from E. Chicago, Ind., and Wood River, Ill., according to conditions and freight rates; no prices F.O.B. point of origin can be given.

Weighted Average Prices

OKLAHOMA

	Aug. 12		Aug. 5		July 29	
	No. of cars	**Price**	**No. of cars**	**Price**	**No. of cars**	**Price**
58-60 U. S. Motor, 437 e. p.	146	7.5334	88	7.4489	84	7.9776
60-62 437 e. p. gasoline	1	7.7500	4	7.6875	4	7.6875
60-62 400 e. p. gasoline	1	8.0000	2	8.0625	2	8.0000
64-66 375 e. p. gasoline	2	8.2500	No sales reported		1	8.7500

The above weighted averages have been made up from a wide range of prices reported for spot shipment from Oklahoma plants. Several refiners advanced quotations late last week, while others made no changes in their prices. The result has been a more unsettled market as far as price quotations were concerned, but only a small difference in the average price obtained for the goods.

KANSAS

	Aug. 12		Aug. 5		July 29	
	No. of cars	**Price**	**No. of cars**	**Price**	**No. of cars**	**Price**
58-60 U. S. Motor, 437 e. p.	5	7.9500	5	7.8500	7	8.2321

Kansas refiners advanced quotations slightly for Kansas shipment, but were not as prompt in advancing quotations on a group 3 basis. Price shown above is for Kansas shipment only and reflects the advance on that basis.

GASOLINE AND NAPHTHA

OKLAHOMA	Prices Aug. 12	Prices Aug. 5	Prices July 29
48-50 450 e.p. naphtha...	7.25 – 7.50	7.25 – 7.50	7.75 – 8.00
50-52 450 e.p. naphtha...	7.25 – 7.50	7.25 – 7.50	7.75 – 8.00
56-58 450 e.p. gasoline...	7.00 – 7.25	7.00 – 8.25	7.50 – 7.75
58-60 450 e.p. gasoline...	7.125– 7.375	7.25 – 7.375	7.75 – 7.875
64-66 390 e.p. gasoline...	7.875– 8.00	8.00 – 8.25	8.25 – 8.75
68-70 350-360 e.p. gasoline	8.375– 8.50	8.50 – 8.75	9.00

†Prices nominal ††Only one refiner quoting *Quotations only

CHICAGO RESALE (F. o. b. Group 3, altho goods may originate elsewhere)

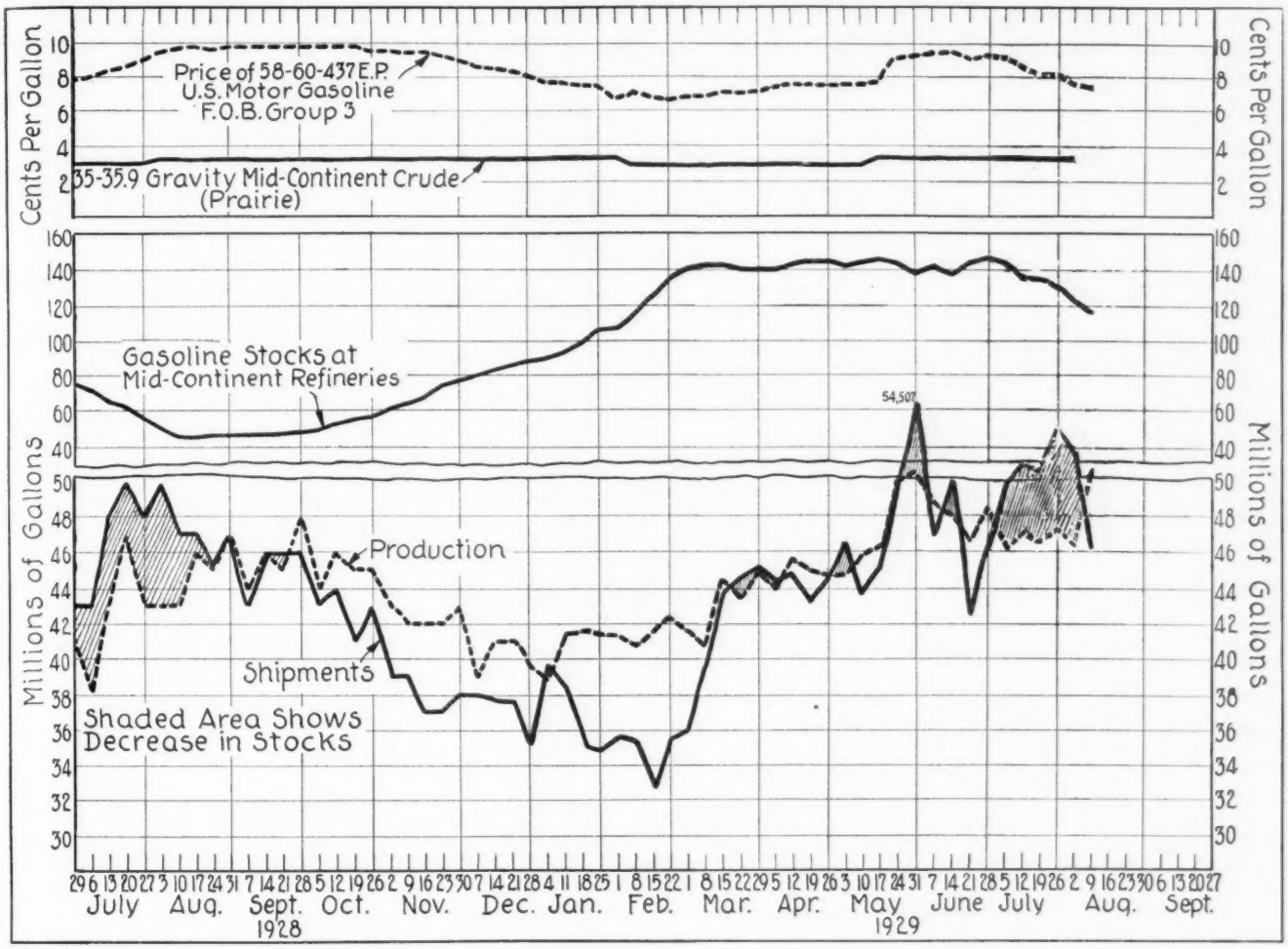
	Prices Aug. 12	Prices Aug. 5	Prices July 29
58-60 U.S. Motor, 437 e.p.	7.25 – 7.50	7.00 – 7.50	7.375– 8.00
60-62 437 e.p. gasoline...	7.375– 7.50	7.25 – 7.625	7.50 – 8.125
60-62 400 e.p. gasoline...	7.625– 7.875	7.625– 7.75	7.875– 8.25
64-66 375 e.p. gasoline...	7.75 – 8.125	7.75 – 8.00	8.125– 8.75

(Continued on Page 130)

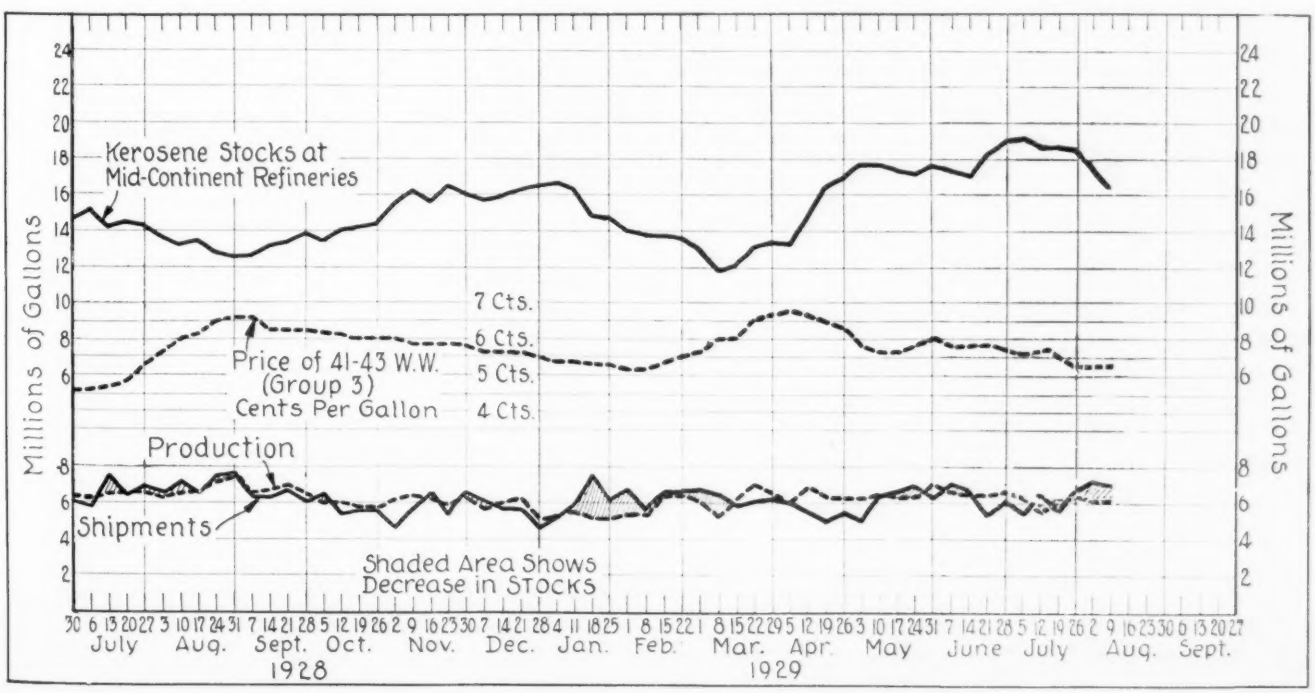
**Represents Both Sales and Quotations.

Barometer of Mid-Continent Refinery Market—Week Ending August 9

Charted Course of Prices, Production, Shipments, Stocks of Principal Refined Products, Week by Week, from Reports Made by 93 Plants to National Petroleum News


Cents Per Gallon
Price of 58-60-437 E.P. U.S. Motor Gasoline F.O.B. Group 3
35-35.9 Gravity Mid-Continent Crude (Prairie)
Gasoline Stocks at Mid-Continent Refineries
54,507
Millions of Gallons
Production
Shipments
Shaded Area Shows Decrease in Stocks
July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June July Aug. Sept.
1928
1929

Prices shown above are extended to date shown in Refinery Market and Crude tables in Market section of this issue and stocks, shipments and Production are extended to date as shown in the table on page 114.



Refinery Markets on Light Oils and Lubricants

Prices given below are in cents per gallon, F. O. B. refinery except where $ is shown

(These Refinery Prices compiled in the OIL PRICE HANDBOOK for a whole year)

PENNSYLVANIA	Prices Aug. 12	Prices Aug. 5	Prices July 29
52-54 Naphtha	8.50 – 9.50	9.00 – 9.75	9.25 – 9.75
54-56 Naphtha	8.75 –10.00	9.25 –10.00	9.50 –10.00
58-60 U.S. Motor 437 e.p.	8.875– 9.25	9.50 –10.25	10.00 –10.25
60-62 400-410 e.p. gasoline	9.25 – 9.50	9.75 –11.00	10.25 –11.00
64-66 390 e.p. gasoline	9.50 –10.50	10.25 –11.00	10.50 –11.25
68-70 Str-run gas 350-360 e.p.	10.50 –11.50	10.75 –12.00	10.75 –12.00
OHIO (Quotations of S. O. Ohio. 4c state tax to be added.)			
U. S. Motor Gasoline			
Ohio, delivery at any point	11.00	11.00	11.00
KANSAS (F. O. B. refinery Kansas destination)			
60-62 400 e.p. gasoline	8.00	8.25	8.50 – 8.75
64-66 375 e.p. gasoline	8.125– 8.25	8.375– 8.50	8.875– 9.00
NORTH TEXAS			
‡45-47 450 e.p. naphtha	6.625– 7.00	6.75 – 7.125	7.50
56-58 450 e.p. gasoline	6.625– 6.875	6.75 – 7.125	7.50
58-60 450 e.p. gasoline	6.625– 6.875	6.75 – 7.125	7.50
58-60 U.S. Motor 437 e.p.	6.875– 7.25	6.875– 7.25	7.50 – 7.75
60-62 400 e.p. gasoline	7.25 – 7.50	7.25 – 7.50	7.75 – 8.00
64-66 390 e.p. gasoline	7.75	7.875– 8.125	8.25
64-66 375 e.p. gasoline	7.875	8.00 – 8.25	8.375
68-70 350-360 e.p. gasoline	8.125	8.375– 8.50	8.625– 8.75
‡Gravity changed from 48-52 to 45-47 Aug. 12.			
****WEST TEXAS (F.o.b. West Texas refinery, for unrestricted shipment)**			
50-52 naphtha	6.625– 7.00	6.75 – 7.25	7.50
56-58 437 e.p. gasoline	6.50 – 7.00	6.75 – 7.125	7.25 – 7.375
58-60 U. S. Motor 437 e.p. gasoline	6.875– 7.25	6.75 – 7.25	7.25 – 7.625
NORTH LOUISIANA (N. La., Ark., and Miss. destination)			
58-60 390 e.p. gasoline	7.75	8.00	8.25
ARKANSAS (Ark., N. La. and Miss. destination)			
58-60 U.S. Motor 437 e.p.	7.75	8.00	.....
CALIFORNIA (3c tax to be added to California gasoline prices if used in state.)			
54-58 U.S. Motor 437 e.p.	7.50 –10.25	7.75 –10.25	7.75 –10.25
58-61 375-400 e.p. gasoline	10.50 –11.50	10.50 –11.25	10.00 –11.00
42-45 Engine Distillate 445-480 e.p.	6.50 – 7.00	7.00 – 8.25	7.50 – 8.50

NATURAL GASOLINE

(Note: End point of all grades, not over 375 F. Corrosion test adopted Oct. 1, 1927; A.S.T.M. Method D130-27T; doctor test, July 2, 1928.)

OKLAHOMA			
Grade AA, 80-87.9, 90% Recovery	6.25 – 6.50	6.25	**6.25 – 6.50
Grade A, 72-79.9, 90% Recovery	**6.375– 6.50	6.25	**6.25 – 6.50
Grade BB, 84-92, 85% Recovery	6.00	5.50	6.00
Grade B, 76-83.9, 85% Recovery	6.00	5.50	6.00
Grade C, 80-90, 78% Recovery	6.00	5.50	6.00
NORTH TEXAS (F. o. b. Breckenridge)			
Grade AA, 80-87.9, 90% Recovery	6.25 – 6.50	6.25	**6.25 – 6.50
Grade A, 72-79.9, 90% Recovery	**6.375– 6.50	6.25	**6.25 – 6.50
Grade BB, 84-92, 85% Recovery	6.00	5.50	6.00
Grade B, 76-83.9, 85% Recovery	6.00	5.50	6.00
Grade C, 80-90, 78% Recovery	6.00	5.50	6.00
NORTH LOUISIANA (F. o. b. Monroe District)			
Grade AA	†6.50	†6.50	†6.50
Grade BB	†6.25	†5.75	†6.25
Grade C	†6.25	†5.75	†6.25
CALIFORNIA			
75-85, 375-390 e.p. blend	8.50 – 9.00	8.50 – 9.00	8.50 – 9.00

†Prices nominal ††Only one refiner quoting *Quotations only **Represents both sales and quotations.

BURNING OILS

PENNSYLVANIA	Prices Aug. 12	Prices Aug. 5	Prices July 29
45 w.w. kerosene	6.125– 6.375	6.00 – 6.25	6.125– 6.25
46 w.w. kerosene	6.375– 7.00	6.50 – 7.00	6.50 – 6.75
47 w.w. kerosene	6.75 – 7.50	6.75 – 7.25	6.75 – 7.25
300 mineral seal	7.25 – 7.375	7.25 – 7.375	7.25 – 7.375
CHICAGO RESALE (F. o. b. Group 3, altho goods may originate elsewhere)			
41-43 w.w. kerosene	5.125– 5.25	5.125– 5.25	5.125– 5.50
OKLAHOMA			
41-43 w.w. kerosene	5.125– 5.50	5.125– 5.50	5.125– 5.375
42-44 w.w. kerosene	5.625– 6.00	5.50 – 5.75	5.625– 5.75
KANSAS (F. O. B. refinery Kansas destination)			
41-43 w.w. kerosene	5.75 – 6.00	5.625– 6.125	5.75 – 6.00
42-44 w.w. kerosene	6.00 – 6.25	6.125– 6.25	6.00
NORTH TEXAS			
40-42 w.w. kerosene	4.75 – 4.875	4.75 – 5.00	5.00
41-43 w.w. kerosene	4.875– 5.125	4.75 – 5.125	5.00 – 5.375
NORTH LOUISIANA (N. La., Ark. and Miss. destination)			
41-43 w.w. kerosene	5.50 – 5.75	5.50 – 5.75	5.75 – 6.00
42-44 w.w. kerosene	5.75 – 6.00	5.75 – 6.00	6.00 – 6.25
ARKANSAS (Ark., N. La. and Miss. destination)			
41-43 kerosene	5.50 – 5.75	5.50– 5.75	5.75 – 6.00
42-44 kerosene	5.75 – 6.00	5.75 – 6.00	6.00 – 6.25
CALIFORNIA			
38-40 w.w. kerosene	5.00 – 5.50	5.00 – 5.50	5.25 – 5.75

NEUTRAL OIL

PENNSYLVANIA Vis.	(Viscosity at 70°F.)		
200 No. 3 Assoc. Filt.	27.00 –28.50	27.00 –28.50	27.00 –29.00
180 No. 3 Assoc. Filt.	23.50 –26.00	23.50 –25.00	24.00 –26.00
150 No. 3 Assoc. Filt.	18.50 –20.00	19.00 –20.00	19.50 –21.50
(Non Viscous)			
34 Grav. 330-340 Flash	7.50 – 8.00	7.50 – 8.00	7.50 – 8.00
****OKLAHOMA**			
Vis. Color	(Viscosity at 100°F.)		
100—No. 2	6.00 – 7.00	6.00 – 7.00	6.00 – 7.00
150—No. 3	7.50 – 8.25	7.50 – 8.25	7.50 – 8.25
150—No. 4	6.75 – 7.50	6.75 – 7.50	6.75 – 7.50
180—No. 3	9.00 – 9.50	9.00 – 9.50	9.00 – 9.50
180—No. 4	8.75 – 9.25	8.75 – 9.25	8.75 – 9.25
180—No. 5	8.50 – 9.00	8.50 – 9.00	8.50 – 9.00
200—No. 3	9.50 –11.00	9.50 –11.00	9.50 –11.00
200—No. 4	9.00 –10.25	9.00 –10.25	9.00 –10.25
200—No. 5	8.75 – 9.50	8.75 – 9.50	8.75 – 9.50
220—No. 3	12.50 –13.50	12.50 –13.50	12.50 –13.50
220—No. 4	12.00 –12.50	12.25 –12.50	12.25 –12.50
220—No. 5	11.00 –12.00	11.50 –12.00	11.50 –12.00
240—No. 3	13.00 –13.50	13.00 –13.50	13.00 –13.50
240—No. 4	12.00 –13.00	12.00 –13.00	12.00 –13.00
240—No. 5	11.00 –13.00	11.00 –13.00	11.00 –13.00
280—No. 3	14.00 –16.00	14.00 –16.00	14.00 –16.00
280—No. 4	13.00 –15.00	13.00 –15.00	13.00 –15.00
280—No. 5	12.00 –14.00	12.00 –14.00	12.00 –14.00
300—No. 5-6	16.00 –17.00	16.00 –17.00	16.00 –17.00

Refinery Markets Wax, Lubricants, Heavy Oil

Prices given below are in cents per gallon, F. O. B. refinery except where $ is shown

(For quick reference to Refinery Prices, get the OIL PRICE HANDBOOK, published annually)

GULF COASTAL

Vis.	Color	Prices Aug. 12	Prices Aug. 5	Prices July 29
		(Viscosity at 100°F., pour test 0		
100	No. 2 Pale	6.00 – 6.50	6.25 – 6.75	6.75 – 7.25
200	No. 3 Pale	9.00 – 9.50	9.25 – 9.75	9.25 – 9.75
300	No. 3 Pale	10.00 –10.50	10.50 –11.00	10.50 –11.00
500	No. 3½ Pale	11.50 –12.00	11.50 –12.00	12.00 –12.50
750	No. 4 Pale	12.50 –13.00	12.50 –13.00	13.00 –13.50
200	No. 5½ Red Oil	8.50 – 9.00	8.50 – 9.00	8.50 – 9.00
300	No. 5½ Red Oil	9.25 – 9.75	9.75 –10.25	9.75 –10.25
500	No. 6 Red Oil	10.00 –10.50	11.00 –11.50	11.00 –11.50
750	No. 6 Red Oil	11.75 –12.25	11.75 –12.50	12.00 –12.50

CALIFORNIA

Vis.	Color		(Viscosity at 100°F.)	
100	No. 3	9.50 –10.00	9.50 –10.00	9.50 –10.00
200	No. 3	11.50	11.50	11.50
300	No. 3	13.00	13.00	13.00
450	No. 3	15.50	15.50	15.50
550	No. 3	16.50	16.50	16.50
600	No. 3	17.00	17.00	17.00
200	No. 5	11.00	11.00	11.00
300	No. 5	12.00	12.00	12.00
400	No. 5	14.00	14.00	14.00
500	No. 5	15.00	15.00	15.00
600	No. 5	16.00	16.00	16.00
700	No. 7	18.00	18.00	18.00

CYLINDER STOCKS

**OKLAHOMA

190-200 Vis. D at 210° Brt. St.	37.00 –41.00	37.00 –41.00	37.00 –41.00
150-160 Vis. D at 210° Brt. St.	36.00 –38.00	36.00 –38.00	36.00 –38.00
150-160 Vis. E 210° Brt. St.	29.00 –33.00	29.00 –33.00	29.00 –33.00
600 St. Ref. Olive Green	12.00 –16.00	12.00 –17.00	16.00 –19.00
600 St. Ref. Dark Green	11.00 –15.00	12.00 –15.00	14.00 –16.00
Black Oil	5.00	5.00	5.00

PENNSYLVANIA (A. S. T. M. Tests)

600 Steam Refined, filterable	24.00 –27.00	25.00 –27.00	27.00 –29.00
650 Steam Refined	29.00 –35.00	32.00 –35.00	35.00 –37.00
600 Flash	31.00 –37.00	37.00	37.00 –41.00
625 Flash	37.50	38.00 –40.00	39.00 –45.00
600 Warren E	33.50 –36.50	36.00 –36.50	34.50 –36.50
600 Oil City E	32.00 –32.50	32.00	32.50 –35.00
600 D Filtered	37.50 –39.00	39.00	38.50 –40.00
Cold Test Stock, 40-50p. p., 140-150 vis. at 210° 540-550 flash, No. 8 color	52.00 –53.00	52.00 –52.50	52.00 –53.00
40-50 p.p., 140-150 vis. at 210°, 540-550 flash, No. 6-6½ color diluted	50.00 –51.00	50.00 –51.00	51.00 –52.00

WAX

PENNSYLVANIA (Per pound, New York)

122-124 white crude scale, a.m.p.	2.80 – 3.00	3.00	2.75 – 3.00
124-126 white crude scale, a.m.p.	3.00 – 3.125	3.25	2.75 – 3.00

OKLAHOMA

**124-126 White Crude Scale, a. m. p.	2.50 – 2.75	2.50 – 2.625	2.50 – 2.625

CALIFORNIA

White crude scale, per pound, ton lots, a.m.p.	6.00 – 6.50	6.00 – 6.50	6.00 – 6.50

DISTILLATE, GAS AND FUEL OIL

PENNSYLVANIA (For outside Pittsburgh district)

36-40 fuel oil	4.25 – 4.50	4.375– 4.75	4.375– 5.00
30-34 fuel oil	4.125– 4.25	4.25 – 4.375	4.25 – 4.375
28-32 fuel oil	4.125– 4.25	4.25 – 4.375	4.25 – 4.375

CHICAGO RESALE (F. o. b. Group 3, altho goods may originate elsewhere)

	Prices Aug. 12	Prices Aug. 5	Prices July 29
38-40 straw distillate	3.25 – 3.625	3.25 – 3.625	3.25 – 3.625
32-36 ordinary dark gas oil	2.375– 2.50	2.375– 2.50	2.375– 2.50
32-36 dark zero gas oil	2.50 – 2.75	2.50 – 2.75	2.50 – 2.75
32-36 straw zero gas oil	2.75 – 2.875	2.625– 2.875	2.625– 2.875
28-30 zero fuel oil	$0.95 –$0.975	$0.925–$0.95	$0.925–$0.95
28-30 fuel oil	$0.90 –$0.925	$0.875–$0.90	$0.875–$0.90
24-26 fuel oil	$0.675–$0.725	$0.675–$0.725	$0.675–$0.725
18-22 fuel oil, low sulfur	$0.55 –$0.60	$0.55 –$0.60	$0.55 –$0.60
18-22 fuel oil, high sulfur	$0.50 –$0.55	$0.50 –$0.55	$0.50 –$0.55

OKLAHOMA

38-40 straw distillate	3.50 – 3.625	†3.50 – 3.75	†3.375– 3.75
36-38 straw distillate	3.25 – 3.375	†3.125– 3.375	†3.125– 3.375
32-36 straw gas oil	2.50 – 2.75	2.50 – 2.75	2.50 – 2.75
32-36 dark gas oil	2.50 – 2.625	2.50 – 2.625	2.50
32-36 straw zero gas oil	2.625– 2.875	2.625– 2.75	2.625– 2.75
28-30 zero fuel oil	$0.95 – 0.975	$0.925– 0.975	$0.925– 0.975
28-30 fuel oil (in bbls.)	$0.875– 0.925	$0.875– 0.925	$0.875– 0.925
26-28 fuel oil (in bbls.)	$0.775– 0.85	$0.775– 0.85	$0.775– 0.85
24-26 fuel oil (in bbls.)	$0.75 – 0.85	$0.725– 0.85	$0.70 – 0.825
22-26 fuel oil (in bbls.)	$0.60 – 0.65	$0.60 – 0.65	$0.60 – 0.65
18-22 fuel oil (in bbls.)	$0.55 – 0.60	$0.525– 0.575	$0.525– 0.575
16-18 fuel oil (in bbls.)	$0.475– 0.55	$0.475– 0.55	$0.475– 0.55
14-16 fuel oil (in bbls.)	$0.475– 0.525	$0.475– 0.525	$0.475– 0.525

KANSAS (F. O. B. refinery Kansas destination)

38-40 straw distillate	3.50 – 3.75	3.50 – 3.625	3.50 – 3.625
36-38 straw distillate	3.25 – 3.50	3.25 – 3.50	3.25 – 3.50
32-36 gas oil	2.50 – 2.75	2.50 – 2.75	2.50 – 2.75
24-26 fuel oil	$0.75 – 0.775	$0.75 – 0.775	$0.75 – 0.775
18-22 fuel oil	$0.575– 0.65	$0.60 – 0.70	$0.625– 0.70
10-14 fuel oil	$0.50 – 0.55	$0.50 – 0.575	$0.50 – 0.575

NORTH TEXAS

38-40 straw distillate	3.25 – 3.375	3.125– 3.50	3.25 – 3.50
32-36 gas oil, cracked	2.375– 2.50	2.375	2.25 – 2.375
32-36 St. reduced gas oil	2.50	2.375– 2.50	2.375– 2.50
24-26 fuel oil (in bbls.)	$0.60 – 0.675	$0.65 – 0.70	$0.65 – 0.70
20-24 fuel oil	$0.60 – 0.65	$0.60 – 0.70	$0.60 – 0.70

**WEST TEXAS (F.o.b. West Texas refinery, for unrestricted shipment)

34-38 gas oil	2.50	2.375– 2.50	2.25 – 2.375
30-32 gas oil	2.375– 2.50	2.25 – 2.375	2.125– 2.25
18-22 fuel oil	0.40 – 0.50	$0.375– 0.45	$0.375– 0.45

NORTH LOUISIANA (N. La., Ark. and Miss. destination)

32-36 gas oil, dark	2.75 – 3.00	2.75 – 3.00	2.50 – 2.75
32-36 gas oil, straw	2.875– 3.00	2.75 – 3.00	2.75 – 3.00
14-16 fuel oil (in bbls.)	$0.65 – 0.725	$0.65 – 0.75	$0.65 – 0.75

ARKANSAS (Ark., N. La. and Miss. destination)

32-36 gas oil, straw	3.00	3.00	3.00
32-36 gas oil	3.00	3.00	3.00
28-30 gas oil	2.50 – 2.75	2.50 – 2.75	2.50 – 2.75
14-16 fuel oil	.....	$0.65 – 0.70	$0.65 – 0.75

CALIFORNIA (F. o. b. San Joaquin Valley. At San Francisco, 4c per bbl. more)

14-18 fuel oil (per bbl.)	$0.50 –$0.60	$0.50 –$0.60	$0.50 –$0.60
14-18 Bunker oil (per bbl.)	$0.70 –$0.75	$0.70 –$0.75	$0.70 –$0.75
30-34 gas oil (per bbl.)	$0.85 –$1.05	$0.85 –$1.05	$0.85 –$1.05
27 Plus Diesel oil (per bbl.)	$0.85 –$0.95	$0.85 –$1.00	$0.85 –$1.00

PETROLATUMS

PENNSYLVANIA (In barrels, carload lots, f. o. b. refinery. In tank cars ⅝c to ¾c per pound less.) Two refiners quoting.

Snow White	8.375– 8.50	8.375– 8.50	8.375– 8.50
Lily White	7.375– 7.625	7.375– 7.625	7.375– 7.625
Cream White	6.375– 6.625	6.375– 6.625	6.375– 6.625
Light Amber	3.625	3.625	3.625
Amber	3.375	3.375	3.375
Red	3.125	3.125	3.125

PETROLEUM COKE

**OKLAHOMA

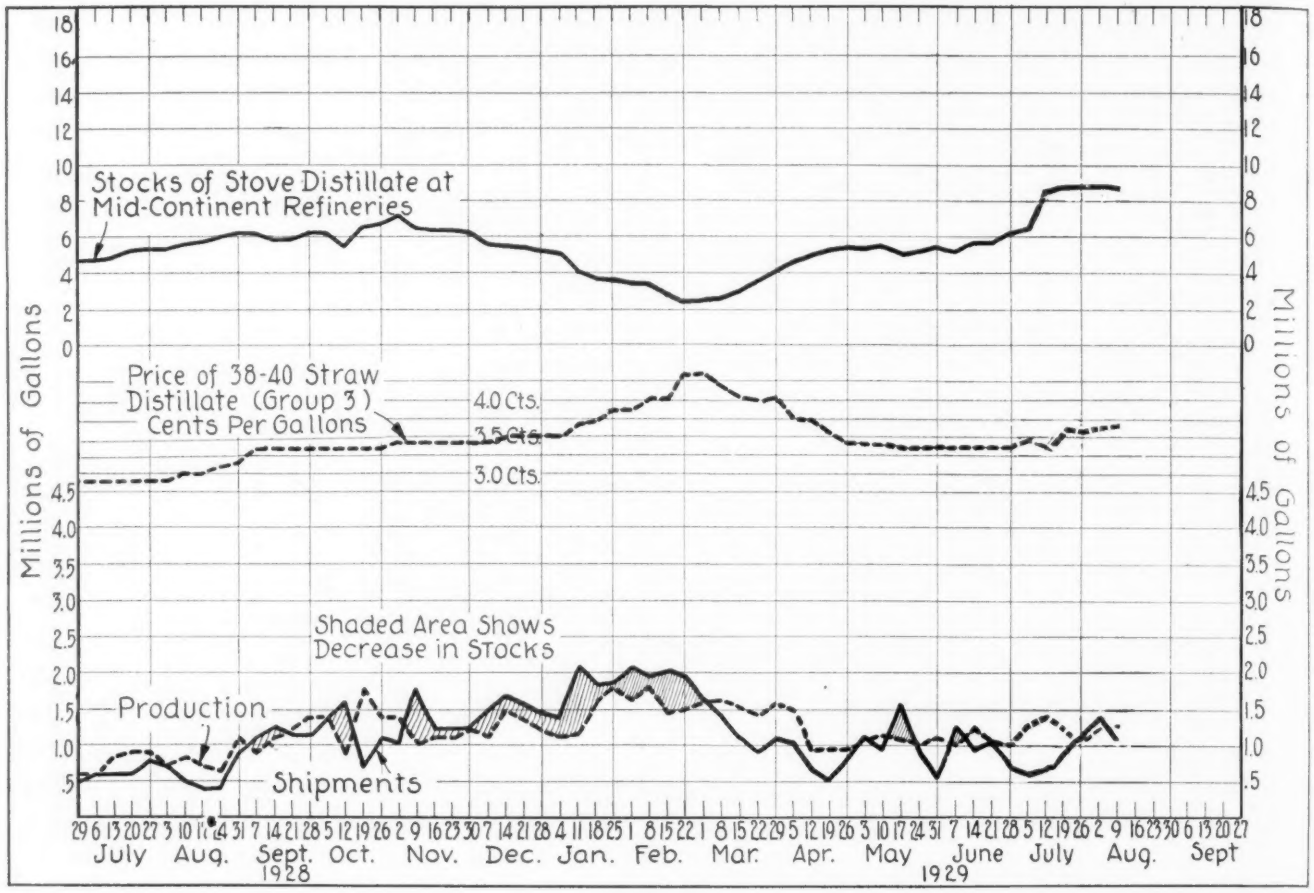
(Per ton in car lots)

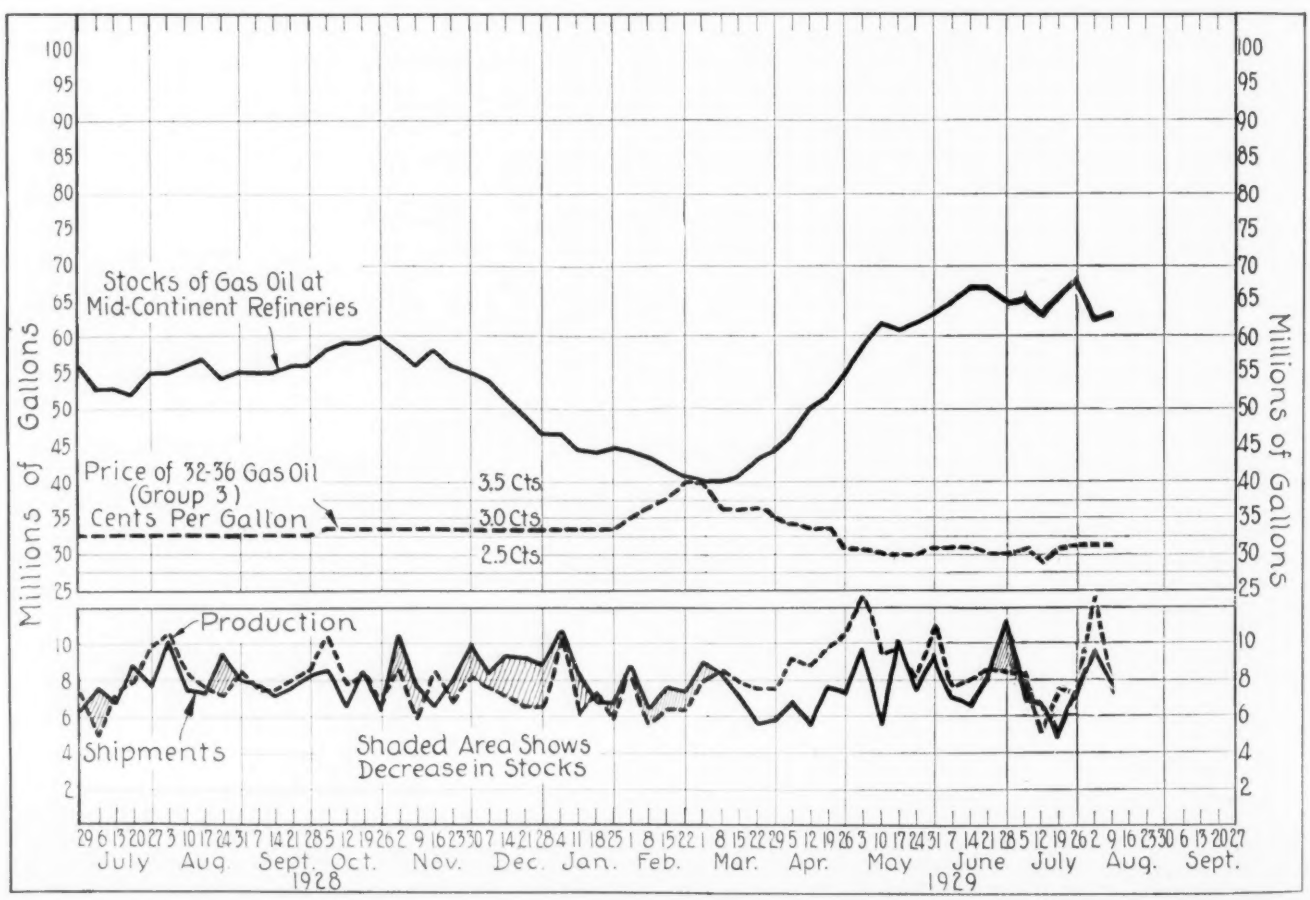
Lump	$4.50 – 5.00	$4.50 –$5.00	$4.50 – 5.00
Still run	$3.00	$3.00	$3.00
Breeze	$2.00	$2.00	$2.00

†Prices Nominal ††Only One Refiner Quoting *Quotations only **Represents both sales and quotations

Barometer of Mid-Continent Refinery Market—Week Ending August 9

Charted Course of Prices, Production, Shipments, Stocks of Principal Refined Products, Week by Week, from Reports Made by 93 Plants to National Petroleum News


Stocks of Stove Distillate at Mid-Continent Refineries
Price of 38-40 Straw Distillate (Group 3) Cents Per Gallons
4.0 Cts.
3.5 Cts.
3.0 Cts.
Shaded Area Shows Decrease in Stocks
Production
Shipments
Millions of Gallons
July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June July Aug. Sept
1928
1929


Stocks of Gas Oil at Mid-Continent Refineries
Price of 32-36 Gas Oil (Group 3) Cents Per Gallon
3.5 Cts.
3.0 Cts.
2.5 Cts.
Production
Shipments
Shaded Area Shows Decrease in Stocks
Millions of Gallons
July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June July Aug. Sept.
1928
1929

Ellisco

REG. U.S. PAT. OFF.

SUPER-SERVICE CANS FOR THE OIL TRADE

Good Trucks *Need* Good Cans

On a good truck, brightly emblazoned with the company's trademark, it's false economy to line the side with cheap, poorly constructed oil cans that quickly show wear and tear.

Overlooking the proved advantages *in service* of Ellisco Cans, they enhance the appearance of the truck. Their smooth steel-jacketed bodies are built to take the numerous knocks and bangs without showing it. They have no corrugations to fill up with dirt and make cleaning hard. Their new locking tops prevent spillage of oil enroute, and their coating of pure tin prevents discoloration and rust. They suggest *good* oil because they're *good* containers.

Appearance is just one of the advantages which have led many of the larger distributors to make Ellisco Cans standard on all their trucks.

Our catalog shows the trademarks of some of these Distributors — and the complete line which many of them are using. We'll be glad to send you a copy.

Why we make a smooth surface—inside and out.

A can that would not dent in spite of the knocks it gets would be too heavy to be convenient. We protect the Ellisco Can against the ordinary knocks with a reinforcing jacket. The flush smooth *inside* surface delivers the oil more quickly and with less necessary drainage, because there is less surface for the oil to cling to—a feature which the customer can appreciate as well as the distributor.

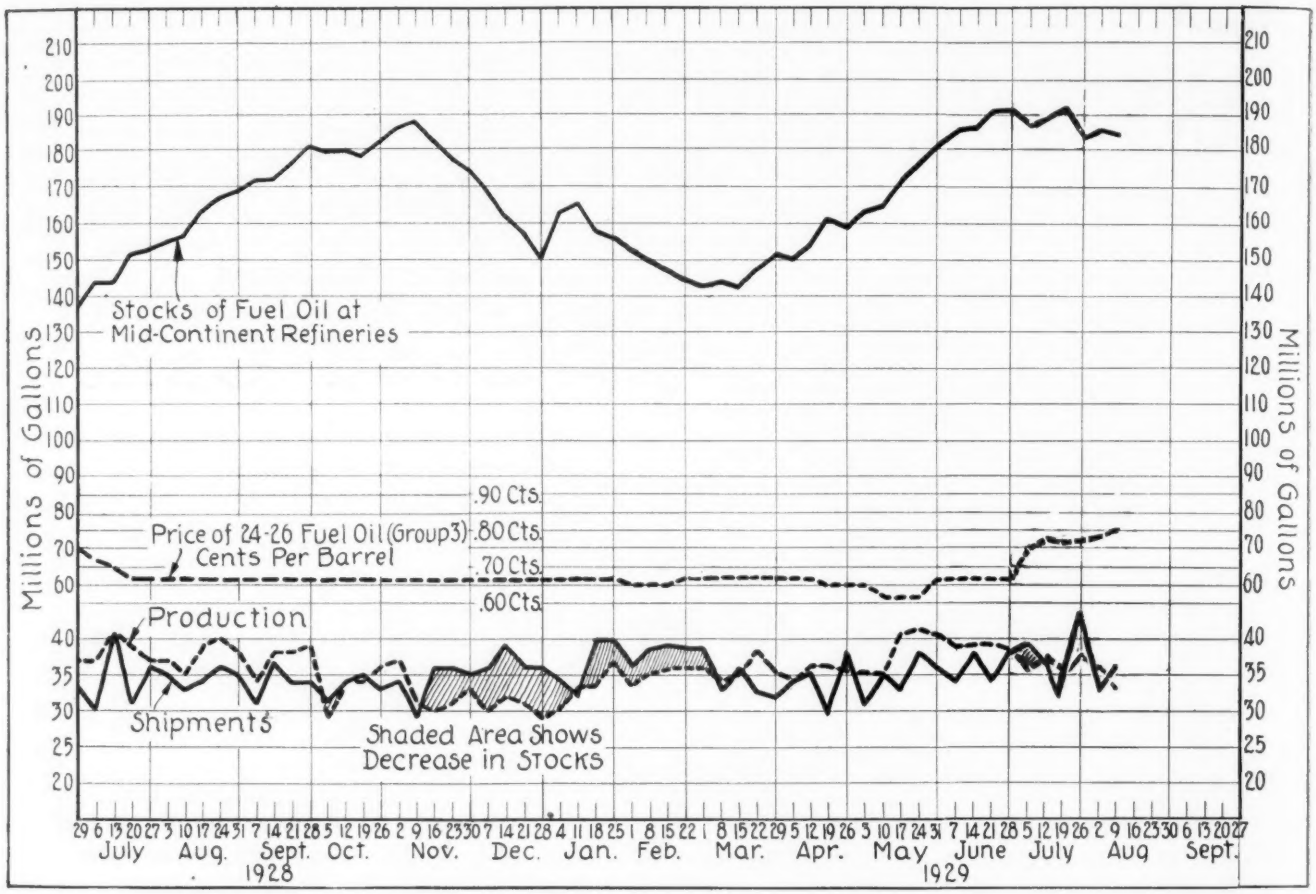
GEO. D. ELLIS & SONS, Inc., 220 Wood Street, Philadelphia, Pa.

ESTABLISHED 1843

THE MANUFACTURERS WHO MAKE THESE CANS THEIR MAIN LINE

Barometer of Mid-Continent Refinery Market—Week Ending August 9

Charted Course of Prices, Production, Shipments, Stocks of Principal Refined Products, Week by Week, from Reports Made by 93 Plants to National Petroleum News



California Refinery Market

Buyers Anticipate Lower Gasoline Prices

LOS ANGELES, Aug. 8

CALIFORNIA petroleum export market continued its quiet trend during the past week, and not much activity was noted in domestic circles.

As long as high tanker rates are coupled with low gasoline prices on the eastern seaboard, local shippers can see little hope of satisfactory business with eastern buyers. Although quotations on U. S. Motor for export continued to range from 7 to 7.50 cents, several dealers stated that they would consider 7 cents excessive, considering present market conditions. They believe the price trend is downward, and they expect to be able to buy at either 6.50 or 6.75 cents in the near future. In their opinion that is the highest price present conditions warrant.

In the domestic market gasoline resellers are evidently buying on a hand-to-mouth basis. Apparently they are under the impression that gasoline will not long continue at the present quoted price of 9.50 to 10.25 cents for in state use, tax excluded.

A heavy surplus of gasoline has caused out of state quotations to shade last week's figures by .25 cents, so that they now range from 7.50 to 8 cents.

Engine distillate moved at from 6.50 to 7 cents and it was indicated that the price would be even lower within the next week or so.

Brisk trade in natural gasoline was noted during the early part of the week several sales being made at 8.25 cents per gallon. Present quotations are within the range of 8.50 to 9 cents.

There is considerable difference of opinion as to what trend natural gasoline prices will take with the enforcement of the new California state gas conservation law. Some dealers contend that there will be a shortage of this commodity with a consequent rise in price while others state that they believe small operators will install absorption plants and thereby increase the percentage of natural gasoline manufactured by Independent operators.

At the present time it is estimated that major operators control over 90 per cent of the natural gasoline manufactured in the state of California. If Independent refiners get their hands in, it is expected that natural gasoline will be considerably weaker.

The fuel oil spot market continued to be a high spot in the matter of sales. Prices on as high as 20 gravity goods were quoted at 50 cents per barrel and several sales were reported made at a shade under this figure.

Retail gasoline marketing conditions have been very unstable during the past week as a number of Independent refiners dumped considerable distress motor fuel on the local market. An increase was noted in the number of service stations selling gasoline for 15 or 15.5 cents whereas major refiners have succeeded in maintaining a price of at least 17.5 cents for Independent products and 19.5 cents for their own gasoline.

Pennsylvania Market

Gasoline Prices Decline Further

CLEVELAND, Aug. 13.—Gasoline prices in western Pennsylvania showed further declines during the week ended Aug. 10. Movement under contract continued relatively heavy and spot demand was a shade better. In view of this, the trade was somewhat at a loss in trying to explain the lower prices, unless, they said, they were the result of depressed conditions prevailing quite generally in markets throughout the rest of the country.

U. S. Motor gasoline was offered in small lots at a minimum of 8.875 cents on Saturday against a low of 9.50 cents at the beginning of the week. Other grades of gasoline dropped proportionately with U. S. Motor.

The kerosene market took a turn for the better, according to the reports of several refiners. Distress goods offered in the market early in the week at 6 cents and lower on the 45 gravity grade was quickly taken up. On Friday and Saturday sellers reported little difficulty in getting 6 to 6.125 cents and many were considering advancing their quotations.

Fuel oils were quiet with prices generally unchanged over the week.

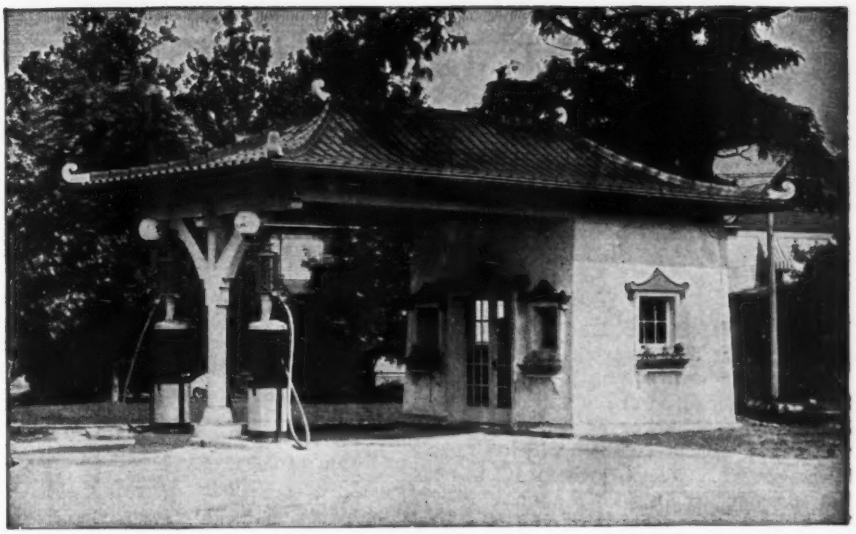
Demand for neutral oils failed to pick up materially and one or two grades were offered at 0.25 to 0.5 cent under prices prevailing at the beginning of the week.

Cylinder stocks were offered freely at prices 1 to 2 cents a gallon under those of last week. Demand was reported only fair.

Bright stock demand was brisk and prices were advanced slightly. The inquiry for wax continued good but few sales resulted. The 122-124 A.m.p. grade was offered Saturday at 2.80 cents per pound New York. It was doubted if this figure could be shaded materially.

PITTSBURGH, Aug. 12.—Burrell-Mase Engineering Co., of Pittsburgh is designing a gasoline recovery plant for the refinery of the Steaua-Romana Co. located in Campina, Roumania.

BUFFALO, Aug. 12.—C. A. Olsen, who has been the refinery engineer of the industrial division of the American Radiator Co. for the past 10 years, has resigned his position as of Aug. 15. He will confine his future efforts to a study of the problems of the petroleum industry.



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Sterling has the Most Complete Line of Motor Trucks in the World!

New York Domestic Market

Seaboard Gasoline Prices Lower

Staff Special
NEW YORK, Aug. 10

FOLLOWING the lead established at New York harbor, prices for gasoline the entire length of the Atlantic seaboard, were from 0.25 to 0.75 of a cent lower at the close of the week. Price cutting which dates back several weeks, was given as the reason by most of the trade. That, and the fact that the period of excellent motoring weather was broken this week by rain followed with lower temperatures.

Early in the week prices at New York fell to 9.50 cents flat as the majority of sellers came into line with competition. This, despite the fact that three sellers were quoting 10 cents. Aug. 10 the majority of quotations were at 9.25 to 9.50 cents with rumors current goods were moving at 9 cents.

New England prices followed and quotations there were 0.50 cent lower for tank car shipment while tank wagon and, in some instances, service station prices, increased. Quotations at other seaboard points were 0.25 cent lower Aug. 10, than when they opened the week. California gasoline sellers also lowered their prices at all points.

Competition among sellers along the seaboard was not alone the cause of the depression in prices, as low-priced gasoline from other districts also had its effect. Reports were that gasoline was moving into western New York state from Group 3, delivered for 10.75 cents. Inasmuch as that would make the f.o.b. plant price about 6.75 cents, several suppliers felt that the gasoline was not actually Group 3 material, but was moving from some other point on a Group 3 basis, probably from western Pennsylvania or Kentucky.

From Franklin, Pa., to Syracuse the freight is 1.625 cents and from the Oil City, Ky., district, the freight is approximately 2 cents. Western Pennsylvania was cited as the most logical point from which the gasoline would move as, at that time, refiners there would only have to shade their price 0.125 of a cent to compete at 10.75 cents delivered.

For some time the tank wagon situation in the Metropolitan district, has been a source of annoyance to refiners operating here. Some weeks ago there were reports that two companies were delivering gasoline to customers by tank wagon at 10.50 cents making their netback at the plant about 9 cents. That was during the 10-cent price period. Now these companies are reported moving gasoline at a price which makes their netback 8.50 cents and under. Two refiners are reported to be meeting this price and, in some instances are delivering the goods in drums as well as tank wagons.

The price in spot tank car shipments is reported better at other points in the eastern markets than at New York. The increase in New England tank wagon has removed some of the pressure from the jobber and he is able to operate with a larger margin of profit. As a result he has not been relying solely on his contracts but is buying a greater amount of gasoline on the spot market.

At points south of New York, excluding Philadelphia, where competition is less keen, prices have not suffered such drastic reductions. The general quotation, at Jacksonville, Savannah, Charleston, Norfolk and Baltimore, was 9.75 cents with only a few reports of shading. A Miami, Fla., jobber stated that some gasoline was moving into the Jacksonville territory, from Group 3, at 10.30 cents delivered. Jacksonville suppliers, however, were not alarmed at this. They say that if Group 3 gasoline is moving there, it is not of sufficient volume as yet to be considered.

California gasoline was being quoted variously from 9.50 to 10 cents, although the majority of the goods was moving at the inside price. The 10-cent quotation was the top on the New York range and largely governed sales to customers near the terminal. For movement from Bayonne into western New York, the price was 9.50 cents.

Still lower prices at all points were being anticipated by the trade Aug. 10. Several believe that all points on the seaboard will level off with New York and that New York will see lower prices by 0.25 of a cent in the near future. Two sellers have reported making small sales at 9 cents, and there are rumors that other sales have been made.

Other commodities were generally unchanged. Heavy oils were in slightly better demand but unchanged in price. Kerosene prices at New York were lower being quoted at 7.75 cents, with occasional sales being made lower.

Gulf Coast Market

Two Gasoline Cargo Inquiries Unplaced

Staff Special
NEW YORK, Aug. 10

A SINGLE foreign inquiry furnished the only activity in the Gulf markets during the week ended Aug. 10.

The inquiry came into the market late in the afternoon of Aug. 7 from an English buyer. It was for a cargo of approximately 70,000 barrels, 58-60 U. S. Motor, for shipment in September. At the close of the week it had not been placed but the supplier working on the deal expected to close it early in the week of August 12.

The inquiry mentioned the week before, a cargo of 60-62, 400 end point gasoline for a United Kingdom buyer, had not been placed up to August 10. The buyer was still in the market, however.

One supplier, who recently entered the cased goods field, stated he had noticed some increase in inquiries from Alaska and South America. The buyers were obtaining prices on U. S. Motor mostly, in lots of from 1000 to 4000 cases. The refiner expected to close several of these inquiries the following week, at prevailing prices.

Although prices were unchanged several sources reported that heavier oils for bulk shipment were in better demand.

Reacting to the lull that has gripped the domestic market at the Gulf for the past several weeks, prices for gasoline and kerosene were lower Aug. 10. U. S. Motor was sold early in the week at 8.75 cents, c.i.f. which, at the prevailing tanker charge, netted 7.75 cents at the Gulf. Later two more sales were made which figured 7.50 cents at the Gulf. These prices prevailed in spite of the fact that two sellers were quoting higher prices.

Kerosene fell off 0.50 cent also, to 6.50 cents per gallon. There was no business transacted but suppliers gave that price as their ideas of the market, basing their ideas on prices in the field.

Wax Market

Foreign Buyers Inquiring

NEW YORK, Aug. 10.—There was a trifle better undertone to the wax market the past week, although only a few sales were made and prices were unchanged. Foreign buyers were inquiring for goods but as far as could be learned no business resulted. Small shipments, mostly on contract, constituted the domestic movement.

White crude scale was being quoted at a flat price of 3 cents and yellow scale at 2.75 to 2.875 cents. Fully refined goods ranged from 4 cents as the low quotation on 123-125 A.m.p. to 6.25 cents the low on 135-137 A.m.p. Most sellers leaned toward the higher price on the former grade but a number said they would accept business at four cents. A broker said with a firm offer on a sizable quantity he could shade 4 cents.

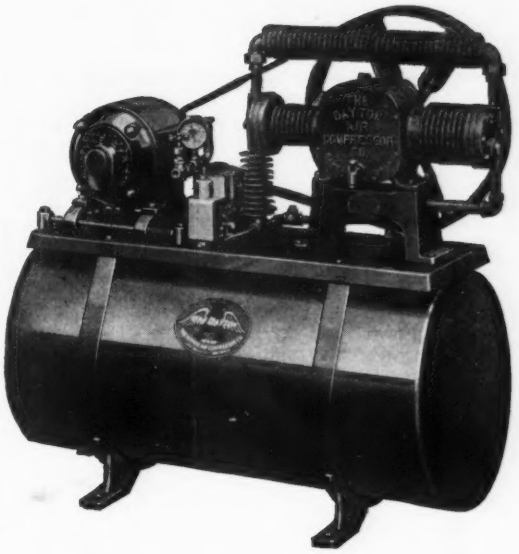
The foreign inquiries continued to bid prices lower than those refiners were willing to accept, yet several suppliers claimed they came nearer the quoted market than for some time in the past. Some of them were a 0.25 of a cent away, where a few weeks ago, bids of 0.50 cent and lower below the market were not uncommon.

Some refiners have taken this as an indication that the market will warrant an increase in prices in a few weeks, or at least bring about a steady movement at the present prices. While it is true that stocks increased approximately 8,000,000 pounds in June they feel that there is ample storage to take care of it and that there will be no great surplus when the fall demand arrives.

It is reported that refiners are unwilling to sell for forward shipment which adds to the belief that a better market is not far away. One of the largest of yellow scale refiners at the Gulf said he was out of the market until the first week in September.

NEW YORK, Aug. 12.—Jesse A. Jones has been appointed general manager of the Swan-Finch Oil Co., Ltd. and the Cataract Refining Co., Ltd., the subsidiaries in England of the Swan-Finch Oil Corp., it is announced by the company here. Mr. Jones has been associated with the Swan-Finch organization for 10 years in both manufacturing and sales departments. His headquarters will be Aldwych House, Aldwych, London WC2, England.

"DAYTONS"—*The Size You Need*



If you are operating an average size station where you require air for tire inflating, greasing, lift operation and not too many other jobs, you had better look into the popular

DAYTON MODEL "G"

This is the G-3; it has 1 H. P. Motor; 56 gallon tank and delivers 5 cub. ft. of clean, free air per min.

No connecting rods, crosshead pins, cotter pins or bolts to come loose and score the cylinder.

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For the Super Station

We have a line of Dayton "A" Models built especially to meet the air needs of the Super Service or One Stop Station. We are illustrating the "Dayton A-2" which has a displacement of 23 cub. ft. of clean air every minute.

Equipped with a 5 H. P. Motor and an 80 gallon tank, yet occupies only 90' of space.

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Tell us what uses you now have for air.

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ST. PAUL - - - - MINNESOTA

Complete Seaboard Market

(Export Markets for whole year given in OIL PRICE HANDBOOK. Each volume carries refinery, tank wagon, crude and export markets—complete for the whole year)

Eastern Domestic Market

(Prices for tank car lots, f. o. b. refinery or seaboard terminal, representing majority of quotations.)

U. S. MOTOR GASOLINE	Aug. 12	Aug. 5	July 29
New York harbor	9.25– 9.50	9.50 –10.00	9.50 –10.00
Portland district	**10.75–11.00	**11.00–11.50	*11.50
Boston district	**10.25–10.75	**10.50–11.00	*11.00
Providence district	**10.25–10.75	**10.50–11.00	*11.00
Philadelphia district	9.50–10.00	9.50 –10.00	10.00
Baltimore district	9.75	10.00	10.00
Norfolk district	9.75	10.00	10.00
Charleston district	9.75	10.00	10.00
Savannah district	9.75	10.00	10.00
Jacksonville district	9.75	10.00	10.00
CALIFORNIA, U. S. MOTOR GASOLINE			
New York habor	9.50 –10.00	10.00	10.00
Philadelphia district	9.50	9.50 – 9.75	10.00
Baltimore district	9.50 – 9.75	10.00	10.00
WATER WHITE KEROSENE			
New York harbor	7.75	7.75 – 8.00	7.75 – 8.00
Philadelphia district	7.75	7.75 – 8.00	7.75 – 8.00
Baltimore district	8.00	8.00	8.00
Gas OIL: 28-34 Gravity			
New York harbor	4.75	4.75	4.75
Boston district	4.75	4.75	4.75
FURNACE OIL: 36-40 Gravity			
New York habor	6.00 – 6.50	6.00 – 6.50	6.00 – 6.50
Boston district	6.00 – 6.50	6.00 – 6.50	6.00 – 6.50
GRADE C BUNKER OIL†			
New York harbor	$1.05	$1.05	$1.05
Boston district	$1.05	$1.05	$1.05
DIESEL OIL			
New York harbor	$2.00 –$2.10	$2.00 –$2.10	$2.00 –$2.10
MEDICINAL OILS, RUSSIAN			
.885-890 s.g. 320-330 vis.	$0.82 – 0.97	$0.75 – 0.80	$0.75 – 0.80
.870-875 s.g. 145-155 vis.	$0.74 – 0.89	$0.65 – 0.70	$0.65 – 0.70

Note: Above gasoline prices do not include inspection tax levied in some states

*Minimum delivered. **Delivered prices. †Lighterage 5c per bbl. additional

New York Export Market

(Lubricating oils are per gal. in bbls.)

	Aug. 12	Aug. 5	July 29
CYLINDER OILS (Pennsylvania Products)			
Bright stock, dark	57.00	57.00 –59.00	57.00 –59.00
600 D filtered	46.00 –47.00	45.00	45.00
600 Warren E filtered	42.00 –43.00	42.00 –43.00	42.00 –43.00
600 s.r. unfiltered	30.00 –33.00	33.00 –35.00	33.00 –35.00
650 s.r. unfiltered	36.00 –39.00	39.00 –42.00	39.00 –42.00
600 flash, s.r.	41.00 –43.00	45.00	45.00
630 flash, s.r.	45.00 –46.00	46.00 –48.00	46.00 –48.00
RED ENGINE OILS (Vis. 100°)			
300 vis. No. 6½ color	20.00 –21.00	20.00 –21.00	20.00 –21.00
250 vis. No. 6 color	18.00 –20.00	18.00 –20.00	18.00 –20.00
200 vis. No. 6 color	16.00 –17.00	16.00 –17.00	16.00 –17.00
PALE ENGINE OILS (Vis. 100°)			
230 vis. No. 3¾ color	20.00 –21.00	20.00 –21.00	20.00 –21.00
180 vis. No. 3¼ color	17.00	17.00	17.00
100 vis. No. 2¼ color	16.00	16.00	16.00
MOTOR OILS (Vis. 100°)			
600 vis. No. 7 color	33.00 –34.00	33.00 –34.00	33.00 –34.00
500 vis. No. 6½ color	31.00	31.00	31.00
400 vis. No. 7¼ color	30.00	30.00	30.00
300 vis. No. 6 color	23.00 –25.00	23.00 –25.00	23.00 –25.00
200 vis. No. 6 color	20.00 –22.00	20.00 –22.00	20.00 –22.00
MEDICINAL OILS			
.875-880 s.g.	$0.76 – 0.91	$0.80	$0.80
.860-.865 s.g.	$0.58 – 0.73	$0.70	$0.70
WAXES (In cents per pound, f.a.s. carload lots)			
WHITE CRUDE SCALE (In barrels)			
122-124 A.m.p.	3.00	3.00	2.75 – 3.00
124-126 A.m.p.	3.00	3.00	2.75 – 3.00
FULLY REFINED (In burlap bags)			
123-125 A.m.p. Phila.	4.00 – 4.25	4.00 – 4.25	4.00 – 4.25
125-127 A.m.p.	4.00 – 4.25	4.00 – 4.25	4.00 – 4.25
128-130 A.m.p.	4.50	4.50	4.50
130-132 A.m.p.	5.25 – 5.50	5.25 – 5.50	5.25 – 5.50
133-135 A.m.p.	6.00 – 6.25	6.00 – 6.25	6.00 – 6.25
135-137 A.m.p.	6.25 – 6.50	6.25 – 6.50	6.25 – 6.50
YELLOW CRUDE SCALE			
124-126 A.m.p.	2.75 – 2.875	2.75 – 2.875	2.625– 2.875

Gulf Export Market

(Prices are f. o. b. Gulf oil terminals in Texas and Louisiana, shipments of 20,000 bbls. or more unless otherwise noted and for export shipment only).

GASOLINE	Aug. 12	Aug. 5	July 29
U. S. Motor	8.50	8.50	8.50
60-62, 400 e.p.	9.50	9.50	9.50
61-63, 390 e.p.	9.75	9.75	9.75
64-66, 375 e.p.	10.00	10.00	10.50
U. S. Motor, cases (cargoes)	$1.85	$1.85	$1.85
64-66, cases (cargoes)	$2.00	$2.00	$2.00
KEROSENE			
44 water white	8.00	8.00	8.00
41-43 prime white	7.00	7.00	7.00
Water white, cases (cargoes)	$1.80	$1.80	$1.80
Prime white, cases (cargoes)	$1.70	$1.70	$1.70
DOMESTIC GAS & BUNKER OILS			
*26-30 translucent gas oil	4.00	4.00	4.00
*30 plus translucent gas oil	4.00 – 4.125	4.00 – 4.125	4.00 – 4.125
Grade C bunker oil	$0.90 –$0.95	$0.90 –$0.95	$0.90 –$0.95
Grade C bunker oil, cargoes	$0.70 –$0.80	$0.70 –$0.80	$0.70 –$0.80
*Less than ½ of 1% sulphur.			
MEXICAN CRUDE AND BUNKER OILS (F. O. B. Steamer, Tampico)			
Heavy Panuco crude taxes to be paid	$0.60 –$0.65	$0.60 –$0.65	$0.60 –$0.65
Grade C bunker oil for bunkering purposes, taxes paid	$0.90 –$0.95	$0.90 –$0.95	$0.90 –$0.95
SOUTH TEXAS LUBRICATING OILS, (Viscosity at 100° F. (cold test 0) (Tanker, f. o. b. Houston)			
100 vis. No. 2 unfiltered pale	7.00	7.00	7.00
200 vis. No. 3 unfiltered pale	8.50 – 9.50	8.50 – 9.50	8.50 – 9.50
300 vis. No. 3 unfiltered pale	9.50 –10.50	9.50 –10.50	9.50 –10.50
500 vis. No 3½ unfiltered pale	11.00 –12.00	11.00 –12.00	11.00 –12.00
750 vis. No. 4 unfiltered pale	13.50 –14.00	13.50 –14.00	13.50 –14.00
1200 vis. No. 5 unfiltered pale	16.50 –17.00	16.50 –17.00	16.50 –17.00
200 vis. No. 5-6 red oil	8.00 – 8.50	8.00 – 8.50	8.00 – 8.50
300 vis. No. 5-6 red oil	8.50 – 9.00	8.50 – 9.00	8.50 – 9.00
500 vis. No. 5-6 red oil	10.00 –10.50	10.00 –10.50	10.00 –10.50
750 vis. No. 5-6 red oil	12.00 –12.50	12.00 –12.50	12.00 –12.50
1200 vis. No. 5-6 red oil	16.50 –17.00	16.50 –17.00	16.50 –17.00

Gulf Domestic Market

(Prices are f.o.b. Gulf oil terminals in Texas and Louisiana in shipments of 20,000 bbls. or more, representing sellers' opinions, for domestic shipment only).

	Aug. 12	Aug. 5	July 29
U. S. Motor gasoline	7.50	8.00	8.00
41-43 w.w. kerosene	6.50	6.75 – 7.00	6.75 – 7.00
*26-32 translucent gas oil	4.00	4.00	4.00
*Less than ½ of 1% sulfur.			

Pacific Export Market

(Quotations are at seaboard, Los Angeles, in cargo lots, cents per gallon, except where otherwise noted.)

	Aug. 12	Aug. 5	July 29
Gasoline, U. S. Motor, 53-55 Gravity	7.00 – 7.50	7.00 – 7.50	7.00 – 7.50
Gasoline, U. S. Motor-blends and special cuts	7.50 –10.00	7.50 –10.00	7.50 –10.00
Gas Oil, 30-34, per barrel	$0.95 –$1.05	$0.95 –$1.05	$0.95 –$1.05
Diesel Oil, 27 plus, per barrel	$0.875–$1.00	$0.875–$1.00	$0.875–$1.00
Bunker oil, 14-18, per barrel	$0.70 –$0.85	$0.70 –$0.85	$0.70 –$0.85
Fuel oil, 14-18 per barrel	$0.60 –$0.85	$0.60 –$0.85	$0.60 –$0.85
Kerosene, 38-40 w.w., 125-150 flash, per gal.	5.75 – 6.25	5.75 – 6.25	5.75 – 6.25
Cased Goods			
Gasoline, U. S. Motor	$1.75 –$1.85	$1.75 –$1.85	$1.75 –$1.85
Kerosene, 38-40 w.w., 125, 150 flash	$1.45 –$1.50	$1.45 –$1.50	$1.45 –$1.50

Tanker Rates

(Approximate tanker freight rates to Continental ports, in shillings per ton of 2240 pounds, British sterling; to American ports, cents per barrel.)

	Aug. 12 Crude &/or Fuel	Refined Oil &/or Spirits
Calif. to U. K. or Continental ports*	35	38-40
Gulf to U. K. or Continental ports*	23	22/6
North Atlantic to U. K. or Continental ports*	20	20
Calif. to North Atlantic ports (not E. of N. Y.)	$0.90-$1.00	$0.95-$1.00
Gulf to North Atlantic ports (not E. of N. Y.)**	38-40	40-42

*Continental ports in the range between Bordeaux and Hamburg, both inclusive.

**Venezuela loading same rate. For Tampico 5c per bbl. additional.

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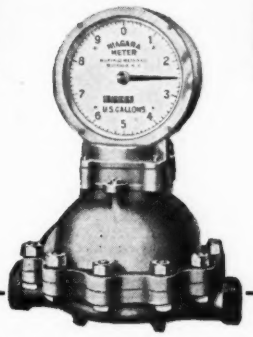

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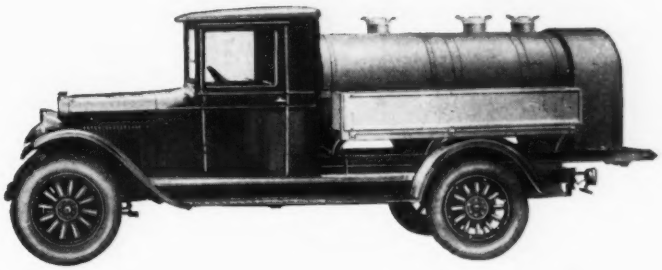

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FLEXLUME
ELECTRIC DISPLAYS

Tank Wagon Service Station Markets for Gasoline and Kerosene

(OIL PRICE HANDBOOK has t.w. and s.s. markets for a whole year, arranged for quick reference)

These Prices in Effect Aug. 12, 1929, as Posted by Principal Marketing Companies

S.O. NEW JERSEY TERRITORY

	Gasoline T.W.	Tax	Total T.W.	S.S.	Oil T.W
Atlantic City, N.J.	12	2	14	18	13
Newark, N. J.	14	2	16	20	13
Annapolis, Md.	14	4	18	22	13
Baltimore, Md.	14	4	18	22	12
Cumberland, Md.	14	4	18	22	13
Washington, D. C.	14	2	16	20	12
Danville, Va.	14	5	19	23	12
Norfolk, Va.	14	5	19	23	13
Richmond, Va.	14	5	19	23	13
Roanoke, Va.	13	5	18	21	13
Petersburg, Va.	14	5	19	23	13
Charleston, W. Va.	14	4	18	22	13
Keyser, W. Va.	14	4	18	22	13
Parkersburg, W. Va.	14	4	18	22	13
Wheeling, W. Va.	14	4	18	22	13
Charlotte, N. C.	14	5	19	23	13
Hickory, N. C.	14	5	19	23	13
Mt. Airy, N. C.	14	5	19	23	13
Salisbury, N. C.	12	5	17	20	13
Charleston, S. C.	14	6	20	24	13
Columbia, S. C.	14	6	20	24	13

CONTINENTAL OIL

Denver, Colo.	14	4	18	21	15.5
Pueblo, Colo.	14	4	18	21	15.5
Grand Junc., Colo.	18.5	4	22.5	25.5	19
Casper, Wyo.	17	4	21	24	14
Cheyenne, Wyo.	18	4	22	25	15.5
Butte, Mont.	20.5	5	25.5	28.5	20
Helena, Mont.	20.5	5	25.5	28.5	20
Salt Lake City, Utah.	18.5	3½	22	25	17
Boise, Ida.	20.5	4	24.5	27.5	19
Twin Falls, Ida.	20.5	4	24.5	28.5	19
Albuquerque, N. M.	16	5	21	24	17

S. O. CALIFORNIA

Phoenix, Ariz.	14	4	18	22	20.5
Los Angeles, Cal.	16.5	3	19.5	22.5	15.5
Fresno, Cal.	17	3	20	23	17
San Francisco, Cal.	17	3	20	23	15.5
Reno, Nev.	21	4	25	28	19
Portland, Ore.	17.5	3	20.5	23.5	16.5
Seattle, Wash.	17.5	3	20.5	23.5	16.5
Spokane, Wash.	21.5	3	24.5	27.5	20.5
Tacoma, Wash.	17.5	3	20.5	23.5	16.5

Note: 4c per gal. discount to dealers off t.w. price of gasoline to customers taking tank truck delivery, thru S. O. California territory, except 1c discount at Phoenix to dealers only.

S. O. LOUISIANA

Little Rock, Ark.	14	5	19	23	13
Alexandria, La.	‡14	4	‡18	‡22	†16
Baton Rouge, La.	12	4	16	20	†14.5
Lake Charles, La.	††14.5	4	††18.5	††22.5	†16
New Orleans, La.	*12.5	4	*16.5	20.5	†16
Shreveport, La.	13.5	4	17.5	21.5	†15
Lafayette, La.	**14	4	**18	**22	†14
Bristol, Tenn.	14	5	19	23	14
Chattanooga, Tenn.	15	5	20	24	16
Knoxville, Tenn.	15	5	20	24	16
Nashville, Tenn.	14	5	19	23	16
Memphis, Tenn.	13	5	18	22	12.5

*New Orleans gasoline prices include 1c parish tax in addition to 4c state tax, and kerosene prices include 1c state tax and 1c parish tax.

†Kerosene price in Louisiana includes 1c state tax.

**Lafayette gasoline prices include 1c parish tax in addition to 4c state tax.

††Lake Charles gasoline prices include 1c parishtax.

‡Alexandria gasoline prices include 1c Rapides Parish tax.

S. O. KENTUCKY

Ashland, Ky.	13	5	18	19	15.5
Catlettsburg, Ky.	13	5	18	19	15.5
Lexington, Ky.	16	5	21	22	15.5
Louisville, Ky.	16	5	21	23	15
Covington, Ky.	16	5	21	22	15.5
Clarksdale, Miss.	15	5	20	22	12.5
Gulfport, Miss.††	17.5	5	22.5	24.5	14
Jackson, Miss.	16	5	21	23	13
Natchez, Miss.	15.5	5	20.5	22.5	14
Vicksburg, Miss.	15.5	5	20.5	22.5	14
Birmingham, Ala.	16	4	20	22	15
Mobile, Ala.‡	16	4	20	22	15
Montgomery, Ala.*	17	4	21	23	16.5
Atlanta, Ga.	16	4	20	22	†16.5
Augusta, Ga.	16	4	20	22	†15.5
Macon, Ga.	17	4	21	23	†16.5
Savannah, Ga.	16	4	20	22	†15.5
Jacksonville, Fla.	16	6	22	24	14.5
Miami, Fla.	17	6	23	25	15.5
Tampa, Fla.	16	6	22	24	14.5
Pensacola, Fla.**	17	6	23	25	14.5

Note: Net price to dealers is 2c under posted t.w. price thru S. O. Kentucky territory.

*Local privilege tax of 1 cent on gasoline and ½ cent on kerosene at Montgomery included. ‡Mobile gasoline prices include 1c city tax.

†Georgia kerosene prices include 1c state tax.

**Both tank wagon prices include 1c city tax at Pensacola, which went into effect Oct. 15, 1926.

††Both tank wagon prices at Gulfport include Harrison county privilege tax of 2c.

Latest Changes in Tank Wagon Prices

S. O. New Jersey—T.w. cut 2c and s.s. 3c, Salisbury, to 17 and 20c respectively, including 5c tax, **Aug. 3.**

S. O. Indiana—S.s. price only cut 2c, E. St. Louis, to 17.4c, **Aug. 1.** T.w. unchanged at 18.4c, including 3c tax.

S. O. Ohio—T.w. cut 1c, s.s. 2c, both to 18c, thru Montgomery and Jefferson counties, **Aug. 6.**

T.w. and s.s. cut 1c, both to 17c, Findlay, **Aug. 7.**

T. w. cut 1c, s. s. 2c, Greenville, both to 18c, including tax, **Aug. 12.**

S. O. NEBRASKA

	Gasoline T.W.	Tax	Total T.W.	S.S.	Oil T.W.
Omaha, Neb.	16.25	4	20.25	22.25	13.25
McCook	17.75	4	21.75	23.75	14.75
Norfolk	16.75	4	20.75	22.75	13.75
North Platte	17.75	4	21.75	23.75	14.50
Scottsbluff	17.75	4	21.75	23.75	14.25

S. O. INDIANA

Chicago, Ill.	16	3	19	20	13
Decatur, Ill.	16.2	3	19.2	20.2	13.1
E. St. Louis, Ill.	15.4	3	18.4	17.4	12.2
Joliet, Ill.	16.4	3	19.4	20.4	13.3
Peoria, Ill.	16.2	3	19.2	20.2	13.1
Quincy, Ill.	16.2	3	19.2	20.2	12.9
Indianapolis, Ind.	16.2	4	20.2	21.2	14.2
Evansville, Ind.	16	4	20	21	14
South Bend, Ind.	16.4	4	20.4	21.4	14.4
Detroit, Mich.	16.8	3	19.8	20.8	14.7
Grand Rapids, Mich.	16.7	3	19.7	20.7	14.6
Saginaw, Mich.	16.9	3	19.9	20.9	14.8
Green Bay, Wisc.	16.6	2	18.6	19.6	13.4
Madison, Wisc.	16.3	2	18.3	17.3	13.1
Milwaukee, Wisc.	16.1	2	18.1	19.1	12.9
La Crosse, Wisc.	17.2	2	19.2	20.2	14
Minneapolis, Minn.	17.2	3	20.2	21.2	13.9
Duluth, Minn.	17.5	3	20.5	21.5	13.9
Mankato, Minn.	17.1	3	20.1	21.1	13.7
Des Moines, Ia.	16.5	3	19.5	20.5	13.3
Davenport, Ia.	16.5	3	19.5	20.5	13.3
Sioux City, Ia.	16.1	3	19.1	20.1	12.9
Mason City, Ia.	16.5	3	19.5	20.5	13.3
St. Louis, Mo.	*15.9	2	17.9	18.9	12.3
Kansas City, Mo.	†16.9	2	18.9	19.9	11.6
St. Joseph, Mo.	†16.5	2	18.5	19.5	12.2
Fargo, N. D.	18.9	3	21.9	22.9	15.9
Grand Forks, N. D.	19.2	3	22.2	23.2	16.2
Minot, N. D.	18.9	3	21.9	22.9	15.9
Pierre, S. D.	17	4	21	22	14.4
Huron, S. D.	17.3	4	21.3	22.3	14.7
Wichita, Kans.	14.8	3	17.8	18.8	11.8
Bartlesville, Okla.	14.5	4	18.5	19.5	11.5

S. O. Indiana's quantity contract price schedule thru territory except Chicago on tank truck deliveries of gasoline, figured from the service station price, is 2c for 500 gals. or more a month; 2½c for 2000 gals. or more a month and 3c for 6000 gals. or more a month.

In Chicago and vicinity, these discounts apply Over 500 gals. per month, 2c per gal. off service station price; over 1,000 gals. per month, 4c per gal. off service station price.

*Includes city tax of ½c.

†Includes city tax of 1c.

S. O. OHIO

	Gasoline T.W.	Tax	Total T.W.	S.S.	Oil T.W.
Ohio state-wide	15	4	19	20	13
Belmont, Columbiana, Jackson, Lorain, Mahoning, Meigs, Noble, Washington, Montgomery, Jefferson and Wayne Counties, and *13CompetitivePoints	14	4	18	18	13
At †6 Competitive Points	14	4	18	19	13
Bryan and Findlay	13	4	17	17	13

Note:—Discount to dealers and commercial accounts generally thru Ohio is 2c per gal. off t.w. price. Exceptions: 3c off in the 11 counties and 13 competitive points quoted on second line above and at Findlay, except that commercial accounts in Belmont, Columbiana, Jackson, Mahoning, Wayne, Montgomery and Jefferson counties and at Greenville get 1c off, dealers get 3c.

†These 6 points are: Hicksville, Celina, Arlington Mortimer, Mendon, and Nevada.

*These 13 points are: Arcadia, Perrysburg, Fostoria, Wapakoneta, Urbana, Jamestown, Marion, St. Paris, Ada, Lima, Hamilton, Greenville, and Piqua.

MAGNOLIA PETROLEUM

Muskogee, Okla.	13	4	17	20	13
Oklahoma City	13	4	17	20	10
Tulsa, Okla.	11	4	15	19	10
Fort Smith, Ark.†	12	†4	16	20	12
Little Rock, Ark.	15	5	20	24	13
Texarkana, Ark.*	13	*4	17	19	12
Dallas, Tex.	13	4	17	21	13
Fort Worth, Tex.	13	4	17	20	12
Houston, Tex.	13	4	17	21	13
San Antonio, Tex.	13	4	17	21	11
El Paso, Tex.	13	4	17	21	16

*Within city of Texarkana, the state tax on gasoline is 4c per gal. conforming with the Texas state tax. In this district outside of the city the 5c Arkansas tax applies.

†Within city of Fort Smith, Oklahoma tax of 4c applies. In this district outside of the city, the 5c Arkansas tax applies.

S. O. NEW YORK

Due to local price conditions at many points in S. O. New York territory, actual prices on both gasoline and kerosene are being made at under the posted tank wagon prices published below.

New York City	17	2	19	*21	15
Albany, N. Y.	16	2	18	20	15
Buffalo, N. Y.	16	2	18	20	14
Rochester, N. Y.	16	2	18	20	13
Syracuse, N. Y.	16	2	18	20	12
Boston, Mass.	16	2	18	20	15
Augusta, Me.	16	4	20	20	15
Manchester, N. H.	16	4	20	22	15
Burlington, Vt.	16	4	20	22	13

Note: S. O. New York allows concessions of 1 to 2c per gal. to dealers under posted tank wagon prices.

*The Standard of New York does not operate stations in New York City. This figure is the retail price of a principal station operator in New York selling Socony gasoline.

ATLANTIC REFINING

Pittsburgh, Pa.	17	*	17	23	14
Philadelphia, Pa.	17	*	17	23	14
Allentown, Pa.	17	*	17	23	14
Erie, Pa.	13	*	13	17	14
Scranton, Pa.	17	*	17	23	14
Altoona, Pa.	17	*	17	23	14
Williamsport, Pa.	16	*	16	20	14
Dover, Del.	17	3	20	22	14
Wilmington, Del.	17	3	20	22	14
Boston, Mass.	16	2	18	20	15
Springfield, Mass.	16	2	18	20	15
Worcester, Mass.	16	2	18	20	15
Fall River, Mass.	16	2	18	20	15
Providence, R. I.	15	2	17	20	15
Hartford, Conn.	16	2	18	20	14
New Haven, Conn.	16	2	18	20	15
Atlantic City, N. J.	16	2	18	20	13
Camden, N. J.	16	2	18	20	13
Trenton, N. J.	16	2	18	20	13

Above prices include these inspection fees on both gasoline and kerosene, per gallon: Alabama, 1,40c on gasoline, 1/2c kerosene; Arkansas, 1/20c on both; Florida, 1/8c on both; Georgia, 1/10c on both; Indiana, 4/25c to 1/2c on both; Kansas, 3/50c on both; Louisiana, 1/32c on gasoline; Minnesota, 3/50c on both; Missouri, 3/10c to 1/2c on both; Nebraska, 3/50c to ½c on both; North Carolina, 1/4c on both; North Dakota, 1/20c on both; Oklahoma, 4/25c on both; South Carolina, 1/8c on both; South Dakota, 1/10c on both; Tennessee, 2/5c on gasoline and 1/2c to 4/5c on kerosene; Wisconsin, 3/50c on both.

Kerosene inspection fees only, per gallon; Iowa, 7/100c; Michigan 1/5c to 4/5c per gal.

In Illinois, cities and villages have the power to appoint oil inspectors and fix inspection fees which is done in some instances. In some cases in the above tate or other states there are local inspection fees.

Tank Wagon, Service Station Markets for Gasoline and Kerosene

Prices in Effect Aug. 12, 1929

ATLANTIC REFINING

	Gasoline T.W.	Tax	Total T.W.	S.S.	Oil T.W.
Annapolis, Md.	16	4	20	22	13
Baltimore, Md.	16	4	20	22	13
Hagerstown, Md.	16	4	20	22	13
Richmond Va.	16	5	21	23	13
Wilmington, N. C.	16	5	21	23	13
Brunswick, Ga.	17	4	21	23	**16.5
Jacksonville, Fla.	17	6	23	25	14.5

Note: 2c per gal. discount off t.w. price to dealers thru territory; also 2c off to commercial accounts under contract for one year.

*4-cent state tax is collected by retail dealer and paid by him directly to state.

**Georgia kerosene prices include 1c state tax.

V. M. & P. NAPHTHA

(Changes ordinarily occur coincident with gasoline price changes)

	Oleum Spirits	V.M.&P. Naphtha	Cleaner Naphtha
Chicago	15.7	17.2	19
Detroit	17.4	18.9	20.7
Kansas City	†15.9	†17.4	†19.2
Milwaukee	16.4	*19.9	*21.7
Minneapolis	*19.7	*21.2	*23
St. Louis	15.6	17.1	18.9
New York		17	23
Boston		19	23

*Includes 2c state tax. †Includes 1c city tax.

Petroleum Spirits

Tank Cars (Solvent)	
New York refineries	12.00
Philadelphia refineries	12.00
Tank Wagon or Steel Barrels	
New York City	17
New England	19
New Jersey	16
Pennsylvania	16-18

CANADA

(Per Imperial Gallon, which is 1.2 American Gallons)

	Gasoline T.W.	Tax	Total T.W.	S.S.	Oil T.W.
ONTARIO					
Toronto	20.5	5	25.5	29	21
Ottawa	14.5	5	19.5	23	21
Cochrane	25.5	5	30.5	..	26
Ft. William	23.5	5	28.5	32	23.5
MANITOBA					
Winnipeg	22.5	3	25.5	29	22.5
SASKATCHEWAN					
Regina	27	3	30	34	27
ALBERTA					
Edmonton	28.5	5	33.5	37	28.5
Calgary	24.5	5	29.5	33	24.5
BRITISH COLUMBIA					
Vancouver	23	3	26	30	24
QUEBEC					
Montreal	21.5	5	26.5	30	22
Quebec City	22.5	5	27.5	31	23
Three Rivers	22.5	5	27.5	31	23
NEW BRUNSWICK					
St. John	25	5	30	34	25
Moncton	25	5	30	34	25
NOVA SCOTIA					
Halifax	25	5	30	34	25
Sydney	25	5	30	34	25
PRINCE EDWARD ISLAND					
Charlottetown	25	5	30	34	25

Note: In districts surrounding these points 1c additional is added to city price.

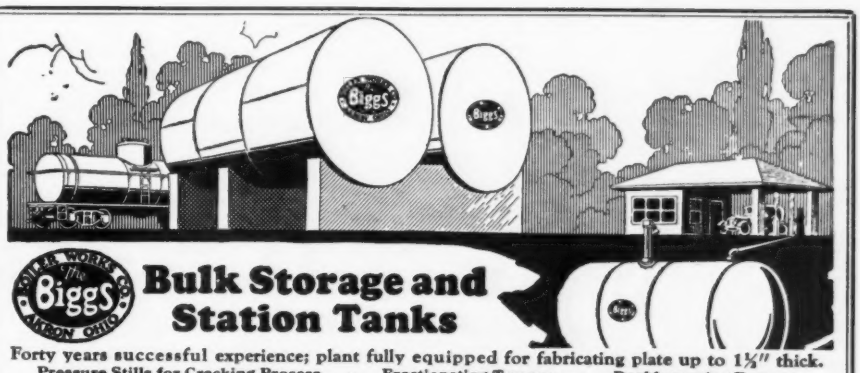
Skilled Supervision
Guarantees the Quality of Gulf Products

COASTAL AND PARAFFINE CRUDES
GASOLINE — LUBRICATING OILS
NAPHTHA — GAS — OILS
WAX — PETROLEUM COKE
CYLINDER—ENGINE—CORDAGE

Gulf Refining Company

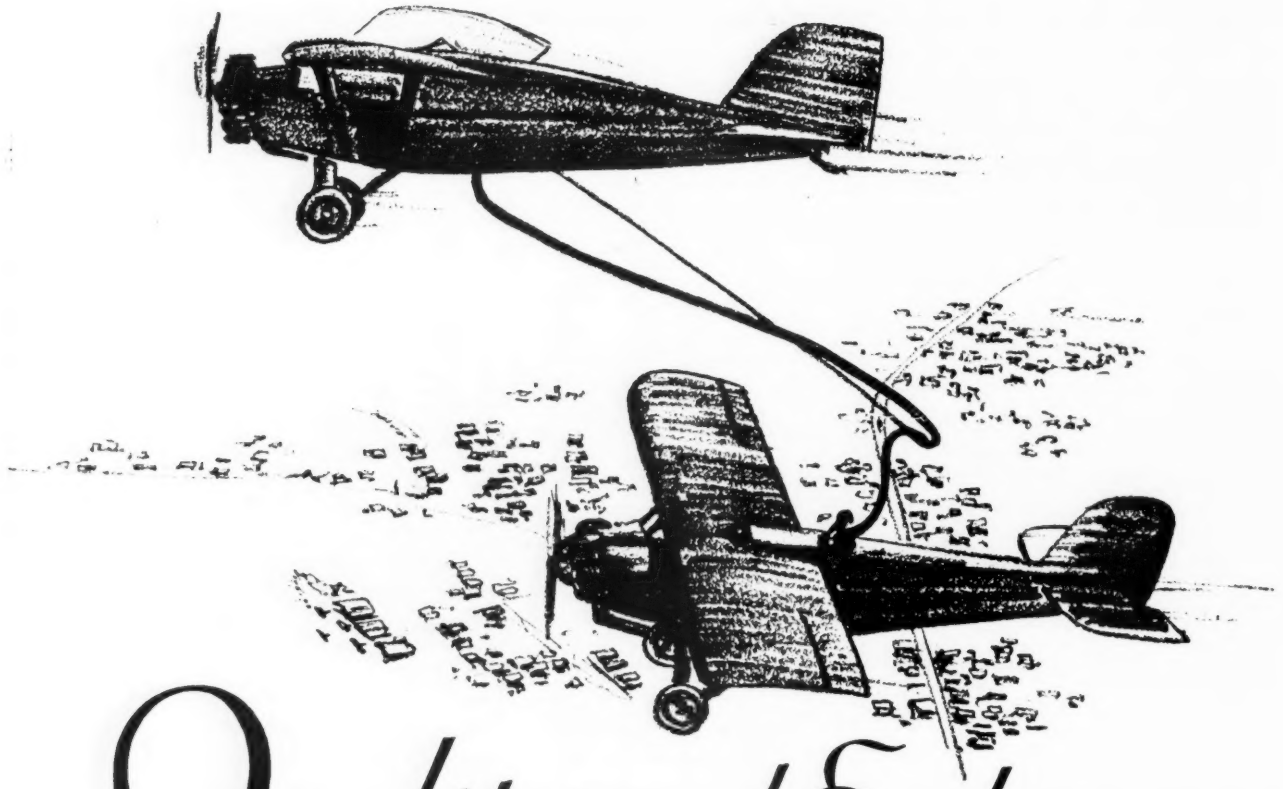
General Sales Offices
PITTSBURGH, PA.

District Sales Offices
New York, Boston, Philadelphia, Louisville, Atlanta, Houston, New Orleans



The Biggs Boiler Works Co. Akron Ohio
Bulk Storage and Station Tanks

Forty years successful experience; plant fully equipped for fabricating plate up to 1½" thick.
Pressure Stills for Cracking Process - Fractionating Towers - Dephlegmating Towers, Bubble Towers - Heat Exchangers - Agitators - Steam Stills - Crude Stills - Condenser Boxes, Run Down Tanks - Blending Tanks - Hemispherical Tanks - Blow Cases - Acid Tanks, Compounding Kettles - Storage Tanks to 80,000 Barrels - Smoke Stacks and Breechings, etc.
THE BIGGS BOILER WORKS COMPANY, Buchtel and Bank Streets, AKRON, OHIO
Eastern Sales Office: 50 Church St., New York *Western Sales Office:* 53 South Dearborn St., Chicago



Quality and Endurance

Imperial

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GASOLINES
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High Compression
Aviation

KEROSENES
TRACTOR FUELS
FURNACE OILS
GAS OILS
FUEL OILS
ROAD OILS
LUBRICATING OILS

A modern development compared to Imperial Products.

The present endurance flights of hundreds of hours, refuelling in the air are a far contrast to the first flight of the two young men from Ohio—the Wright brothers, who startled the world at Kitty Hawk, N. C., on December 17, 1903 when they actually remained in the air on their first flight that lasted slightly less than a minute.

Imperial Gasolines, Hundred Percent—*the premium automotive fuel* and Ideal Flight—*the premium aviation fuel* offer the same contrast in the development of super grade motor fuels.

Imperial Refineries

Imperial Refining Co. **San Angelo Refining Co.**
Kettle Creek Refining Co. **Wickett Refining Co.**

General Offices
TULSA, OKLAHOMA

Crude Oil Prices (in Effect Aug. 12, 1929)

(Crude prices for the whole year in OIL PRICE HANDBOOK published annually)

EASTERN FIELDS

(Posted by Joseph Seep Purchasing Agency)

Penna. Grade Oil in New York Transit Lines (Alleghany, N. Y. District) *$3.55
Bradford District Oil in National Transit Lines (Bradford District) *3.55
Penna. Grade Oil in National Transit Lines (Other Pennsylvania) *3.55
Penna. Grade Oil in Southwest Penna. Pipe Lines (Other Pennsylvania) 3.50
Penna. Grade Oil in Eureka Pipe Lines (West Virginia) 3.40
Penna. Grade Oil in Buckeye Pipe Lines (Macksburg, O. district) 3.25
Corning Grade in Buckeye Pipe Lines (Ohio) 1.90
Corning, O., heavy grade 1.80
Somerset Oil in Cumberland Pipe Lines (Kentucky) 1.80
Ragland Grade in Cumberland Pipe Lines (Kentucky) $0.60

***Oil run prior to July 1, 1929 is $3.50 per bbl.**

(Posted by Stoll Oil Refining Co.)

Oil City, Ky., oil in Stoll lines $1.80

MICHIGAN

(Posted by Dixie Oil Co.)

Dundee (Muskegon) $1.10

Traverse (Muskegon):

32-32.9	$1.25	37-37.9	$1.50
33-33.9	1.30	38-38.9	1.55
34-34.9	1.35	39-39.9	1.60
35-35.9	1.40	40-40.9	1.65
36-36.9	1.45	41-41.9	1.70

(Posted by Pure Oil Co.)

Midland, Midland County $1.70

CENTRAL STATES FIELDS

Posted by Ohio Oil Co.

Effective May 21, 1929

Wooster	$1.90	Princeton	$1.75
Lima	1.80	Illinois	1.75
Waterloo	1.20	Plymouth	1.28
Indiana	1.57	West Kentucky	1.83

CANADIAN CRUDE

Posted by Imperial Oil Refineries, Ltd.

Petrolia $2.20
Oil Springs 2.27

OKLAHOMA, KANSAS and NORTH TEXAS

Prices of Prairie Oil & Gas Co.

(In Oklahoma, Kansas, North and East Central Texas)

Effective May 20, 1929

Below 25	$0.85	35-35.9	$1.40
25-25.9	0.90	36-36.9	1.45
26-26.9	0.95	37-37.9	1.50
27-27.9	1.00	38-38.9	1.55
28-28.9	1.05	39-39.9	1.60
29-29.9	1.10	40-40.9	1.65
30-30.9	1.15	41-41.9	1.70
31-31.9	1.20	42-42.9	1.75
32-32.9	1.25	43-43.9	1.80
33-33.9	1.30	44 and above	1.85
34-34.9	1.35		

Humble Oil & Refining Co. Prices

(Ranger, North Texas, Mexia, Powell, Boggy Creek, Richland, Wortham, Lytton Springs, Currie, Moran and Nocona crudes all in Texas.)

May 20, 1929, same schedule as Prairie in above fields.

Magnolia Petroleum Co.

(In Oklahoma, Kansas and North and East Central Texas)

May 20, 1929, Magnolia posted in above fields and in Panola Co., same schedule as Prairie, except these grades:

Below 26	$0.70	29-29.9	$0.95
26-26.9	0.75	30-30.9	1.05
27-27.9	0.85	31-31.9	1.15
28-28.9	0.90		

May 20, 1929, Glasscock, Crane, Upton, Winkler, Howard and Mitchell Counties same prices as Humble's postings in West Texas which see.

Iatan district $0.93
Corsicana heavy 0.80
Luling 0.90
Mirando 0.90

Carter Oil Co.

(Oklahoma and Kansas)

May 20, 1929, same schedule as Prairie except Carter does not post oil below 25.

PANHANDLE, TEXAS

Humble Oil & Refining Co.

Effective May 20, 1929

Hutchinson and Carson Counties:

Below 32	$0.90	38-38.9	$1.25
32-32.9	0.95	39-39.9	1.30
33-33.9	1.00	40-40.9	1.35
34-34.9	1.05	41-41.9	1.40
35-35.9	1.10	42-42.9	1.45
36-36.9	1.15	43-43.9	1.50
37-37.9	1.20	44 and above	1.55

Wheeler County:

Below 30	$0.90	37-37.9	$1.30
30-30.9	0.95	38-38.9	1.35
31-31.9	1.00	39-39.9	1.40
32-32.9	1.05	40-40.9	1.45
33-33.9	1.10	41-41.9	1.50
34-34.9	1.15	42-42.9	1.55
35-35.9	1.20	43-43.9	1.60
36-36.9	1.25	44 and above	1.65

Gray County:

Below 29	$0.90	37-37.9	$1.35
29-29.9	0.95	38-38.9	1.40
30-30.9	1.00	39-39.9	1.45
31-31.9	1.05	40-40.9	1.50
32-32.9	1.10	41-41.9	1.55
33-33.9	1.15	42-42.9	1.60
34-34.9	1.20	43-43.9	1.65
35-35.9	1.25	44 and above	1.70
36-36.9	1.30		

Above prices met by The Texas Co. and Magnolia on May 20.

WEST TEXAS

Humble Oil & Refining Co.

Effective May 20, 1929

Winkler, Crane, Upton, Crockett, Howard and Pecos Counties, also Lea County, N. Mex.

Below 25	$0.70	25-25.9	$0.74
26-26.9	$0.78	32-32.9	$1.02
27-27.9	0.82	33-33.9	1.06
28-28.9	0.86	34-34.9	1.10
29-29.9	0.90	35-35.9	1.14
30-30.9	0.94	36 and above	1.18
31-31.9	0.98		

May 20, 1929, The Texas Co. posted same prices as Humble in Crane, Upton, Pecos and Winkler., and Magnolia in Crane, Upton, Winkler, Glasscock, Howard and Mitchell

SOUTHWEST TEXAS

(Posted by Humble Oil & Refining Co.)

Effective May 20, 1929

Mirando $0.90
Salt Flat 1.25

NORTH LOUISIANA—ARKANSAS FIELDS

Prices of Standard Oil Co. of Louisiana

Caddo, Homer, Haynesville, Bull Bayou, El Dorado, Crichton, De Soto and **Cotton Valley.

Effective May 22, 1929

Below 28	$1.00	36-36.9	$1.45
28-28.9	1.05	37-37.9	1.50
29-29.9	1.10	38-38.9	1.55
30-30.9	1.15	39-39.9	1.60
31-31.9	1.20	40-40.9	1.65
32-32.9	1.25	41-41.9	1.70
33-33.9	1.30	42-42.9	1.75
34-34.9	1.35	43-43.9	1.80
35-35.9	1.40	44 and above	1.85

**Cotton Valley, below 36, $0.85. Beginning with 36-36.9, same schedule as above.

Smackover, below 24 ..... $0.85
do 24 and above 1.00
Bellevue 1.30
*Urania, La 1.10
†East El Dorado 0.75

*Posted by Louisiana Oil Refining Corp.

†Posted by Magnolia Petroleum Co.

May 20, The Texas Co. same schedule in Louisiana as Standard, plus these grades: 24-24.9, $0.85; 25-25.9, $0.90; 26-26.9, $0.95; 27-27.9, $1.00.

May 22, Magnolia, Atlantic, Shreveport-Eldorado Pipe Line, Louisiana Oil, and Gulf Companies met Standard schedule in Louisiana-Arkansas fields.

STEPHENS, ARKANSAS

Louisiana Oil Refining Corp., and Atlantic Oil Producing Co.

Effective May 22, 1929

Below 28	$0.90	30-30.9	$1.02
28-28.9	0.94	31-31.9	1.06
29-29.9	0.98	32 and above	1.10

GULF COASTAL

Posted by Humble Oil & Refining Co.

Effective May 20, 1929

Grades A	$1.30	29-29.9	$1.30
Grades B:		30-30.9	1.33
Below 25	$1.15	31-31.9	1.36
25-25.9	1.18	32-32.9	1.39
26-26.9	1.21	33-33.9	1.42
27-27.9	1.24	34-34.9	1.45
28-28.9	1.27	35 and above	1.48

Fields classified as A and B are Spindletop, Goose Creek, Hull, Liberty, Sour Lake, West Columbia, Orange, Boling, Pierce Junction, Sugarland and Raccoon Bend. All other fields are Grades A only.

Wages of Shell Oil Co. Employees Raised

LOS ANGELES, Aug. 8.—A general wage increase and reclassification, for employees of the Shell Oil Co., was effected at a recent conference at Santa Barbara.

The change benefits employees in field shops, on pipe line work, in refineries and gasoline plants, garagemen, truck and tractor drivers and to a lesser extent men engaged in development and production work. The wages of firemen and their helpers have been boosted 25 per cent under the new schedule, making their range $5.50 to $7.50 per day. A new position of "general pumper" was established, pay to be at the rate of $5.25 per day.

In the field shops, raises range from 25 to 75 cents more per day, with only one class getting the latter. Truck drivers in the utility fleet will receive a bonus of 4 cents per mile for all mileage of over 1200 miles per month.

Provisions have been made for overtime and vacations schedules have been changed. Time off will be given for all overtime worked in emergencies. When employees have worked the equivalent of one full day overtime they will be required to take this day off in addition to one day off that they are obligated to take in every seven days.

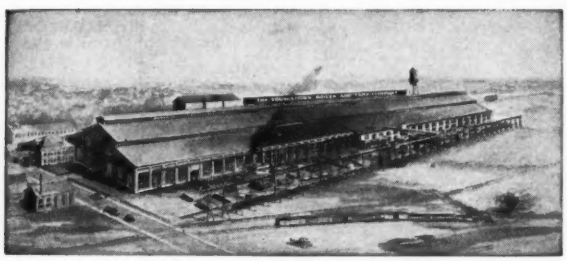
Two weeks vacation with 12 days pay is allotted each employee after one year's service, and the employee will be eligible for only one vacation in each calendar year, such vacation time not to be cumulative. If an employee who is eligible for a vacation is discharged or quits he will be paid the equivalent of his vacation period.

CLEVELAND, Aug. 12.—The report published in June 26th issue of NATIONAL PETROLEUM NEWS that Mid-Continent Petroleum Corp. had obtained an interest in the Baron-Huot Oil Co., of Kankakee, Ill., was in error, according to John D. Curtin, assistant division manager, for the Mid-Continent Petroleum Corp., at Chicago.

RICHMOND, Va., Aug. 9.—Fred E. Lawson, who has owned and operated bulk and service stations, has been appointed representative in this area for the Continental Oil Co., Denver, according to W. A. Stokely, district manager. Mr. Lawson, who was formerly representative for the company in Virginia, West Virginia and North Carolina, succeeds J. D. Lawrence, resigned.

Youngstown TANKS

"KEENE TANKS MADE"
STANDARDIZED
REG. U.S. PAT. OFF.



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Cleveland, Ohio

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Filter Presses — *Wax Moulding Presses*
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Complete Wax Plants designed and built
Pumps, Stills, Towers, Condensers and other Oil Refinery Equipment
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BETHLEHEM STEEL COMPANY, *General Offices, Bethlehem, Pa.*

District Offices

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The first step

in providing safe transportation for your oils, is to ship them in BENETCO steel drums. For after all, good protection must be given your oils if they are to reach the buyer in perfect condition.

BENETCO drums are made of the highest grade steel available. All seams are electrically welded. Rolling hoops are high and sharp enough to protect the side openings from damage when the drum is rolled. They will not flatten out when the drum is rolled or dropped. One man can upend this drum with ease.

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6520 S. Menard Ave., Chicago

BENETCO Steel Containers

Crude Oil Prices (in Effect Aug. 12, 1929)

(Crude prices for the whole year in OIL PRICE HANDBOOK published annually)

GULF COASTAL

Prices of The Texas Co.

Effective May 20, 1929

Grades A	$1.30	*Grades B	$1.15
‡Grades B (light crude):			
35-35.9	$1.49	40-40.9	$1.69
36-36.9	1.53	41-41.9	1.73
37-37.9	1.57	42-42.9	1.77
38-38.9	1.61	43-43.9	1.81
39-39.9	1.65	44 and above	1.85

*Grades B include all heavy crudes which do not meet tests for Grades A or for Gulf Coast light crude.

‡The Texas Co.'s gravity and price schedule on all below 35° is same as Humble's postings on Grades B.

ROCKY MOUNTAIN FIELDS

Prices of Ohio Oil Co., and Midwest Refining Co.

(Salt Creek prices effective May 20, 1929)

‡Salt Creek	29-29.9	$1.10
" "	30-30.9	1.15
" "	31-31.9	1.20
" "	32-32.9	1.25
" "	33-33.9	1.30
" "	34-34.9	1.35
" "	35-35.9	1.40
" "	36-36.9	1.45
" "	37 and above	1.50
Elk Basin		1.65
Grass Creek light		1.65
Big Muddy		$1.43
Lance Creek		1.68
Rock Creek		1.40
Mule Creek		1.20
Rex Lake		1.10
‡Osage		1.65
‡Cat Creek, Mont.		1.65
Sunburst, Mont		1.75
‡Hogback, N. Mex		1.70
Artesia, N. Mex		1.08

‡Posted by Midwest Refining Co. Midwest also buys Grass Creek light and Elk Basin.

CALIFORNIA

***Standard Oil Co. of California**

Gravity	Signal Hill Seal Beach Alamitos Heights Huntington Beach	Inglewood Torrance	Olinda-Brea Canon Richfield	Athens-Rosecrans Dominguez	Elwood Terrace	Whittier La Habra	Coyote Hills	Santa Fe Springs	Newhall McKittrick †Kern River	Midway Sunset Buena Vista & Elk Hills	Lost Hills	Coalinga	Wheeler Ridge	Montebello	Kettleman Hills	*Santa Maria (Orcutt)	*Ventura
14-14.9	$ .70	$ .70	$ .70	....	....	$ .70	$ .70	....	$ .50	$ .50	$ .50	$ .50	$ .50	$ .70	....	$ .65	$ .70
15-15.9	.70	.70	.70	....	....	.70	.70	....	.50	.50	.50	.50	.50	.70	....	.65	.70
16-16.9	.70	.70	.70	....	....	.70	.70	....	.50	.50	.50	.50	.50	.70	....	.65	.70
17-17.9	.70	.70	.70	....	....	.70	.70	....	.50	.50	.50	.50	.50	.70	....	.65	.70
18-18.9	.75	.75	.75	....	....	.75	.75	....	.50	.56	.56	.56	.56	.70	....	.70	.75
19-19.9	.80	.80	.80	....	....	.80	.80	....	.50	.62	.62	.62	.62	.75	$1.65	.70	.80
20-20.9	.85	.85	.85	....	....	.84	.84	....	....	.68	.68	.68	.68	.80	for	.70	.85
21-21.9	.89	.89	.89	....	....	.88	.88	.89	....	.74	.74	.74	.74	.85	55°	.86	.86
22-22.9	.93	.93	.93	....	....	.91	.91	.92	....	.80	.80	.80	.80	.90	gravity	.87	.87
23-23.9	.97	.97	.97	....	....	....	.94	.95	....	.85	.85	.85	.85	.95	and	.90	.90
24-24.9	1.01	1.01	1.01	1.01	....	....	.97	.98	....	.90	.90	.88	.88	.98	over	.94	.94
25-25.9	1.05	1.05	1.05	1.05	....	....	1.00	1.01	....	.95	.95	.91	.91	1.01	....	.98	.98
26-26.9	1.09	1.09	1.09	1.09	....	....	1.04	1.04	....	1.00	1.00	.94	.94	1.04	....	1.02	1.02
27-27.9	1.13	1.13	1.13	1.13	....	....	1.08	1.07	....	1.05	1.05	.98	.97	1.07	....	....	1.06
28-28.9	1.17	1.17	1.17	1.17	....	....	1.12	1.10	....	1.10	1.10	1.02	....	1.10	....	....	1.10
29-29.9	1.21	....	1.21	1.21	....	....	1.16	1.15	....	1.16	1.16	1.06	....	1.13	....	....	1.14
30-30.9	1.25	....	1.25	1.25	....	....	1.20	1.20	....	1.22	1.22	1.10	....	1.16	....	....	1.18
31-31.9	1.30	....	....	1.30	....	....	....	1.25	....	1.28	1.28	1.14	....	....	....	....	1.23
32-32.9	1.35	....	....	1.35	....	....	....	1.30	....	1.34	1.34	1.18	....	....	....	....	1.28
33-33.9	....	....	....	1.41	....	....	....	1.35	....	1.40	1.40	1.22	....	....	....	....	1.34
34-34.9	....	....	....	1.47	$1.16	....	....	1.40	....	....	1.46	1.26	....	....	....	....	....
35-35.9	....	....	....	1.53	1.22	....	....	1.45	....	....	....	1.30	....	....	....	....	....
36-36.9	....	....	....	1.59	1.28	....	....	1.50	....	....	....	....	....	....	....	....	....
37-37.9	....	....	....	1.65	1.34	....	....	1.55	....	....	....	....	....	....	....	....	....
38-38.9	....	....	....	1.71	1.40	....	....	1.60	....	....	....	....	....	....	....	....	....
39-39.9	....	....	....	1.77	1.46	....	....	1.65	....	....	....	....	....	....	....	....	....
40-40.9	....	....	....	1.83	1.52	....	....	....	....	....	....	....	....	....	....	....	....
41-41.9	....	....	....	1.89	1.58	....	....	....	....	....	....	....	....	....	....	....	....
42-42.9	....	....	....	1.95	1.64	....	....	....	....	....	....	....	....	....	....	....	....

*Santa Maria and Ventura postings are by Union Oil Co. Union Oil Co. posts same prices in all above fields as Standard except it does not post prices in Wheeler Ridge, Whittier, La Habra, Newhall and Kettleman Hills. Standard does not contract for crude testing 11-13.9 gravity, but pays 45c a barrel when purchased.

†Kern River down to 12° gravity is 50c; 11-11.9 is 45c.

REFINERS' and COMPOUNDERS' SUPPLIES

Following are average market prices for materials used by refiners and compounders effective on the date shown.

Refiners' Supplies

	Aug. 12	Aug. 5
Soda Ash light 58% bags, cwt.	$1.32	$1.32
Silicate of Soda 60 deg. drums, cwt.	$1.55	$1.55
Silicate of Soda 40 deg. tank cars, cwt.	$0.60	$0.60
Silicate of Soda 40 deg. drums cwt.	$0.80	$0.80
Sal Soda wks.	$0.90-1.00	$0.90-1.00
Caustic Soda 76% solid, cwt.	$2.90	$2.90
Sulfuric Acid 60 deg. tank cars, f.o.b. shipping point per ton	$11.00	$11.00
Oleum 20%, fuming sulfuric, tank cars, wks.	$18.50	$18.50
Sulfur, flowers of, cwt.	$3.10-4.00	$3.50-4.50
Liquid Chlorine, tank cars, wks, lb.	3.50–5.00	3.50–5.00

Compounders' Supplies

	Aug. 12	Aug. 5
Vegetable Oils		
Linseed carloads, spot, lb.	13.60	13.10
Tanks, spot	12.00	12.30
Soya Bean, Tanks, coast, lb.	9.50	9.50
Oleic Acid		
Distilled, tanks, lb.	9.25	9.25
Distilled, bbls, lb.	10.375	10.375
Saponified, tanks, lb.	9.50	9.50
Saponified, bbls, lb.	10.625	10.625
Lard Oils		
Prime Winter Strained, lb.	14.75	14.75
Extra Winter Strained, lb.	12.25	12.25
Extra, lb.	11.875	11.875
Extra No. 1, lb.	11.50	11.50
No. 1, lb.	11.125	11.125
No. 2, lb.	10.875	10.875
Tallow oil, lb.	10.375	10.375
Neatsfoot Oil		
Pure, bbls, lb.	14.00	14.00
Extra, bbls, lb.	11.75	11.75
No. 1 bbls, lb.	11.375	11.375
Cold Pressed, lb.	18.125	18.125
Fish Oils		
Menhaden Oil		
Light Pressed, gal.	72	72
Light Pressed, tank cars, N.Y., gal.	62	62
White bleached, gal.	77	77
Yellow bleached, gal.	75	75
Whale, extra winter bleached, gal.	82	82
Naval Stores		
Steam distilled turpentine, N. Y., gal.	51	51
Steam distilled turpentine, Savannah, gal.	45	45
Gum turpentine, N. Y., gal.	50	50
Gum turpentine, f.o.b. cars Savannah, gal.	48	48
Wood Rosin F, N. Y., bbl.	$7.30	$7.30
Wood Rosin F, Savn'h, bbl.	$6.50	$6.50
Gum Rosin B, N. Y., bbl.	$8.60	$8.60
Gum Rosin B, f.o.b. cars Savannah, bbl.	$7.75	$7.75
Rosin oil, pure, gal.	61	61
Rosin oil, compounded, gal.	50	50
Pine Tar		
Kiln burnt, bbl.	$13.00–14.00	$13.00–14.00
Retort, bbl.	$13.50–14.50	$13.50–14.50
Alcohol		
Denatured Formula 5, in bbls., per gal.	58–65	57–64

OIL STOCKS AND FINANCES

National Petroleum News

Louisiana Oil Increases Its Southern Outlets

CLEVELAND, Aug. 10

LOUISIANA OIL REFINING CORP., is expanding its marketing facilities in the southern states to which it can ship economically from its Shreveport refineries, following sale of its Ohio and Kentucky marketing properties to the Cities Service Oil Co., M. J. Grogan, president, stated in connection with the company's report on first half of 1929 operations. His statement follows:

"The ever increasing number of inland refineries being constructed in St. Louis and Chicago districts and anticipated changes in the freight rate structure presented a combination of factors that indicated the wisdom of eliminating Ohio and Kentucky as logical marketing territory for petroleum products manufactured in Shreveport. It was deemed advisable, therefore to sell our marketing facilities in Ohio and Kentucky, and a contract of sale was entered into on May 23, 1929.

"Care was taken to secure a purchaser that could utilize the properties to the best advantage and pay for them accordingly, which resulted in a satisfactory transaction for the company. Transfer of the properties was effective June 30, 1929, and as time did not permit the recording of the whole of the transactions in company's accounts, only a portion of the profit is reflected in income statement for period ended June 30.

"Coincident with decision to sell the Ohio properties, an expansion program was launched having as its objective added sales properties in various southern states embracing territories that can be equipped advantageously from company's Shreveport refineries.

"During the six months ended June 30, 1929, company acquired by purchase or lease three bulk plants and three filling stations in Arkansas; two bulk plants and six filling stations in Louisiana; six bulk plants and 20 filling stations in Mississippi, and two bulk plants and three filling stations in Texas. Company also signed contracts whereby within the next few weeks it will acquire, in addition to the above, 22 bulk plants and 143 filling stations in Mississippi and three bulk plants and three filling stations in Arkansas."

Profits of Three More Companies Increase

CLEVELAND, Aug. 10.—Larger profits in the first half of 1929 than in the first half of 1928 were reported this week by three more oil companies that issued comparative reports. These companies are the Hancock Oil Co. of California, Richfield Oil Co. and the Warner-Quinlan Co.

Net earnings of $459,939 were reported by the Standard Oil Co. of Kansas. Statements issued this week were:

Six Months	1929	1928
Hancock Oil Co.	†$351,586	†$78,655
Richfield Oil Co.	4,246,397	3,110,684
Signal Oil Co.	666,382	.....
Standard Oil Co., Kansas	459,939	.....
Universal Cons. Oil Co.	*2,038,529	.....
Warner-Quinlan Co.	1,072,872	707,310

†Before federal taxes. *Before reserves and federal taxes.

Petroleum Corp. Issues Initial Statement

NEW YORK, Aug. 10.—Petroleum Corp. of America from its organization Jan. 21 to June 30 netted $1,384,163, the company states in its first report. The earnings, according to the report, were derived from dividends and interest and do not include appreciation in value of the company's holdings mostly in Prairie Oil & Gas Co. and Prairie Pipe Line Co.

The corporation also announced this week that it had elected to call for payment on Oct. 1 the balance of $14 a share on the subscription price of its stock. The original offering of 3,250,000 shares of stock was made on the basis of $20 per share paid in, with $14 per share subject to call. Payment of the balance will add upwards of $40,000,000 cash to the treasury of the corporation, part of which will be used to pay indebtedness incurred for purchases already made and the remainder of which will be at the disposal of the company for its development.

In a review of the company's activities, it is pointed out that initial investments exceeding $47,000,000 were made in the capital stock of the Prairie Oil & Gas Co. and the Prairie Pipe Line Co. Since that time additional investments have been made in these companies, which still constitute the preponderance of the company's holdings, although investments have also been made in eight or nine other companies. As of June 30, the cost of the company's investments stood at over $59,000,000, while their market value exceeded $61,500,000.

The corporation's balance sheet at June 30 showed total assets of $62,354,138, including cash of $2.247.772. Paid in surplus amounted to $22,750,000 and earned surplus, $1,384,163. The uncalled balance of $14 per share on the capital stock will be divided equally between capital and paid in surplus. The report points out that the net cash income for the period represents a return on the net cash paid in, namely $55.250,000, at the annual rate of about 5¾ per cent.

Gas Line to Atlanta, Ga., Finances with Bonds

CLEVELAND, Aug. 10.—The Southern Natural Gas Corp. which is building a 421-mile pipe line from the Monroe and Richland gas fields in Louisiana to Atlanta, Ga., this week offered $13,000,000 first mortgage 6 per cent sinking fund gold bonds at 97½. The bonds mature in 1944.

The company reports having supply contracts extending beyond the 15-year term of the bonds and also distribution contracts to supply 11 cities, besides Atlanta, in Mississippi, Alabama and Georgia.

The line with the required auxiliary equipment and interest on the bonds during construction has been estimated by engineers at $22,100,000, according to a letter from a vice-president of the company to the bond underwriters.

Vacuum Warns Against Promotion Schemes

CLEVELAND, Aug. 10.—Vacuum Oil Co. has warned its stockholders that the company has no connection with schemes of certain stock promoters in offering issues of other oil

(*Continued on Page* 143)

"I bought my own station and I picked my own Oil"

"I built my service station without the help of any oil manufacturer. I am free to choose my own oil. I picked Monogram because I believe it's best for my customers."

Any Monogram distributor will tell you that he chose Monogram because he believes in it. He knows the outstanding reputation of Monogram among builders of motor cars, motor boats and airplanes. He knows from his own experience that the well-known saying "Monogram Stands Up" is not merely a phrase but a fact.

The reasons for the Monogram extra-lubrication service are fundamental. It is made from the highest grade premium crude. It is refined to develop the finest lubricating qualities. There is no lowering of standards for greater quantity and greater profit.

Refill your car with Monogram. Then you can see for yourself the reason for the experts' preference.

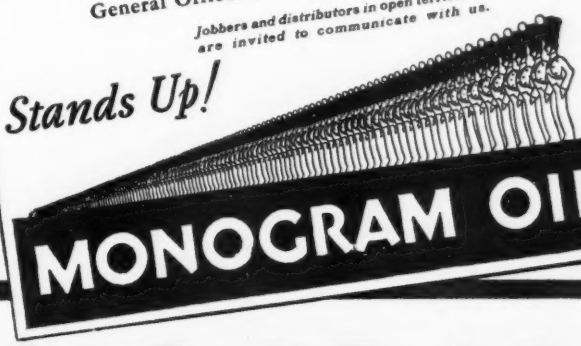
NEW YORK LUBRICATING OIL COMPANY

Makers of Monogram Since 1893

General Offices: 116 Broad Street, New York City

Jobbers and distributors in open territories are invited to communicate with us.

Stands Up!



If you want an Independent Future.....

TIE up with an organization that is helping its distributors to build for themselves. Plan your future on the basis of your own exclusive territory.

As a Monogram distributor who has picked his oil on merit alone, you can command the confidence of your customers. They will respect your advice. And the Monogram franchise guarantees you against competition from company-owned stations.

Your future is in your own making! We do our part. We make Monogram Oil to the high standards followed for thirty-six years. We give you a nationally-recognized product to sell. In our advertising, we tell your customers why Monogram "Stands Up". And we tell them why they can place their confidence in you.

Let us send you the full particulars of our exclusive territory proposition. You will find it a secure foundation for your present and future business. Write or wire today.

New York Lubricating Oil Company
Makers of Monogram—Estab. 1893
General Offices:
116 Broad Street New York City

Advertisement which appeared in Collier's August 10. Read the Monogram advertising. You will find that it helps to build good will and sales for the independent Monogram distributor.

MONOGRAM

Stands Up!

Transactions in Oil Shares on New York Stock Exchange

1928 High	1928 Low	1929 High	1929 Low	Listed Capital	Par Value	Stocks	Div. Rate	Last Paid	Transactions Week Ended Aug. 10 Sales	First	High	Low	Last	Change
43⅞	27⅛	42⅝	22½	(sh) 922,075	N.P.	Amerada Corp.	50cQ	July 31, 29	6,400	27⅛	27½	24½	27⅞	— 1⅝
85	51¼	64¾	31	(sh) 209,180	N.P.	American Republics Corp.	....	.....	4,100	38	38	†31	33½	— 4⅜
53⅜	37½	47¼	40	$56,000,000	$25	Associated Oil.	50cQ	June 30, 29	190	44½	44½	44	44	— ½
62½	50	77⅛	53½	50,000,000	25	Atlantic Refining.	‡25cQ	June 15, 29	77,600	65⅛	65⅞	62¼	62⅝	— 3⅜
53	20	49⅛	33⅛	47,261,125	25	Barnsdall Corp. A.	‡50cQ	Aug. 6, 29	58,400	34⅞	36⅜	†33⅛	34½	— ⅝
51⅛	20	49	38⅛	300,525	25	do B.	‡50cQ	Aug. 6, 29	.....	.....	.....	.....	.....	.....
24½	12¼	29½	20	(sh) 956,075	N.P.	Beacon Oil.	....	.....	8,100	28½	28½	27	28½	— ⅜
36	25¼	30	25	$51,524,150	$25	California Petroleum.	....	Jan. 1, 29	.....	.....	.....	.....	.....	.....
.....	....	35⅞	29½	(sh) 4,634,163	N.P.	Continental Oil (Delaware).	....	.....	41,000	29⅜	29⅞	28½	29	— 1½
94⅛	68	91½	63	21,031,400	100	General Asphalt.	....	.....	10,500	88½	88½	85⅛	86	— 2½
141	110⅛	136	104½	6,628,200	100	do pfd.	$1.25Q	June 1, 29	.....	.....	.....	.....	.....	.....
167	79	107	68¾	25,000,000	100	Houston Oil.	....	.....	3,900	75⅞	75⅞	†68¾	68¾	— 8⅛
38⅜	21¾	39¼	29⅛	(sh) 1,333,157	N.P.	Independent Oil & Gas.	50cQ	Apr. 30, 29	18,100	30⅞	30⅞	†29¼	29⅜	— 1⅝
39⅝	9	52⅝	29	$4,299,190	$10	Indian Refining.	....	Dec. 15, 20	30,900	45¾	45⅞	39¼	41⅞	— 3¾
37¼	8½	48¾	28	4,550,110	10	do ctfs.	....	.....	11,000	43⅝	43¾	38	40⅛	— 3⅝
185	140	165	160	1,977,700	100	do pfd. new.	$1.75Q	July 1, 29	.....	.....	.....	.....	.....	.....
39⅛	27⅜	38⅜	26	3,992,387	N.P.	Lago Oil & Transport.	....	May 2, 27	1,000	31	31	29½	29½	— 2½
19¾	9⅜	18	10⅜	(sh) 1,187,298	N.P.	Louisiana Oil Refining.	....	.....	13,200	11	11⅜	†10⅜	10½	— ⅝
96	78	100	89	$4,000,000	$100	do pfd.	$1.62½	Aug. 15, 29	100	90⅜	90⅜	90⅜	90⅜	— ⅛
25½	12½	18½	12	(sh) 330,000	N.P.	Maracaibo Oil.	....	.....	2,200	15¼	15¼	14⅞	14⅞	— ⅜
49¾	33	47⅛	33⅛	(sh) 2,316,897	N.P.	Marland Oil Co.	....	Mar. 31, 27	.....	.....	.....	.....	.....	.....
360	250	295	205	$45,942,800	$100	Mexican Petroleum.	$3Q	July 20, 29	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	12,000,000	100	do pfd.	$2Q	July 20, 29	.....	.....	.....	.....	.....	.....
73	45⅛	69⅜	33½	(sh) 995,500	N.P.	Mexican Seaboard.	....	Nov. 15, 24	22,900	38¾	38¾	†33½	35	— 3⅛
44⅛	25⅛	39⅞	30½	(sh) 1,857,461	N.P.	Mid-Continent.	50cQ	May 15, 29	18,800	32½	33	31⅜	32½	— 1½
120½	103¼	121	120¼	$6,718,000	$100	do pfd.	$1.75Q	June 1, 29	.....	.....	.....	.....	.....	.....
7⅜	2⅜	5⅛	3	23,849,720	10	Middle States.	....	July 1, 23	30,200	3⅝	3⅞	†3	3⅛	— ½
5⅞	1½	3⅝	2⅛	5,950,500	10	do ctfs.	....	.....	12,200	2¾	2¾	†2⅛	2⅝	— ⅛
2¼	1	1½	1	(sh) 3,500,000	N.P.	Pacific Oil.	....	.....	5,000	1	1	1	1	0
55½	38¼	63	41⅛	$50,000,000	$50	Pan American P. & T.	....	Oct. 20, 27	7,000	60¾	60¾	58	58½	— 2⅝
58⅞	37⅜	66¾	40½	121,101,400	50	do B.	....	Oct. 20, 27	112,700	60	60½	56¾	59¼	— 2⅝
28⅝	15½	17½	13¾	(sh) 400,000	N.P.	Pan American Western B.	....	Jan. 30, 27	240	13¾	14	13⅝	13¾	0
21⅜	11½	15¼	7⅜	(sh) 199,370	N.P.	Panhandle P. & R.	....	.....	1,400	8⅛	8⅛	†7⅜	7⅛	— 1
106¼	70	76	47½	$2,935,200	$100	do pfd.	....	July 2, 23	.....	.....	.....	.....	.....	.....
53⅜	35¼	47	35	(sh) 2,406,803	N.P.	Phillips Petroleum.	37½cQ	July 1, 29	8,800	35⅞	36¼	†35	35⅛	— 1⅜
5¼	½	3⅜	1½	$29,622,925	$25	Pierce Oil.	....	.....	500	1⅞	1⅞	†1½	1⅝	— ¼
50	16¼	51½	30	15,000,000	100	do pfd.	....	Feb. 1, 22	300	36	36¼	36	36	+ 1
6⅝	3½	5⅞	4	(sh) 2,500,000	N.P.	Pierce Petroleum.	....	.....	1,900	4¾	4¾	4½	4½	— ⅝
64⅝	59½	65⅝	50	$60,636,450	$25	Prairie Oil & Gas.	....	Aug. 31, 27	11,800	51	51¾	†50	50⅝	— ½
.....	....	61⅞	50	101,250,000	25	Prairie Pipe Line.	‡75cQ	June 30, 29	8,900	59⅞	60⅜	†50	60	0
29⅞	16	25⅞	11¼	37,450,850	50	Producers & Refiners.	....	Sept. 15, 23	2,200	15½	15¾	†11½	14	— 1¼
49⅝	41	45¾	34	2,845,350	50	do pfd.	....	May 1, 25	60	34	37½	†34	36	— 1½
31¼	19	30¾	23½	75,959,255	25	Pure Oil Co.	37½cQ	June 1, 29	18,800	25¼	25½	24¼	24⅝	— ¼
119	108	115½	111½	13,000,000	100	do 8% pfd.	$2Q	July 1, 29	60	112½	112½	112	112½	0
56	23½	49⅝	38⅜	47,127,725	25	Richfield Oil.	50cQ	Aug. 15, 29	9,500	39¾	40	†38⅜	38⅞	— 1
....	....	42½	26½	(sh) 1,200,000	N.P.	Rio Grande Oil Co.	‡$1S.A.	July 25, 29	8,800	28½	28½	†26½	26½	— 2
64	44⅝	55⅝	31¾	(sh) 546,646	$13.40	Royal Dutch N. Y. shares.	$1.873	Aug. 10, 29	1,900	51½	52⅛	50⅝	50⅝	— ½
57½	39⅜	55⅜	43	(sh) 65,203,000	£2	Shell Transport & T.	96.4c	Feb. 8, 29	.....	.....	.....	.....	.....	.....
39⅜	23¼	31⅜	25	12,254,979	N.P.	Shell Union Oil.	35cQ	July 1, 29	42,700	26⅞	26⅞	†25	25½	— ½
27¼	18⅛	39⅝	18¼	$8,357,280	$10	Simms Petroleum.	40cQ	June 15, 29	22,100	33⅜	34⅞	32¾	33¼	— ⅜
46¾	17⅜	45	31½	5,494,095	N.P.	Sinclair Consolidated.	‡50cQ	July 15, 29	75,900	33¾	34	†31½	32½	— 1⅜
110	102½	111	107¾	$16,025,200	$100	do pfd.	$2Q	Aug. 15, 29	.....	.....	.....	.....	.....	.....
42⅝	25	46½	32⅞	27,396,590	25	Skelly Oil Co.	50cQ	June 15, 29	15,900	41	41	38⅜	38¾	— 1¾
80	53	81⅞	64	(sh) 13,016,435	N.P	S. O. California.	62½cQ	June 15, 29	21,100	70⅝	71⅜	69¼	70	— 1½
59¾	37¾	62⅜	48	$612,095,850	$25	S. O. New Jersey.	‡25cQ	June 15, 29	60,800	57⅛	57½	56⅛	56¾	— ½
45½	28¾	45¾	37⅝	434,094,575	25	S. O. New York.	40cQ	June 15, 29	41,600	39	39¼	†37⅝	37⅝	— ⅞
77	31½	75	57	(sh) 1,297,847	N.P.	Sun Oil.	25cQ	June 15, 29	1,200	72	72	70	70⅞	— 1⅛
110	100	105½	100	$5,000,000	$100	do pfd.	$1.50Q	June 1, 29	250	104	104¼	102⅝	103⅜	— ⅛
14¼	2½	12	6	(sh) 1,304,698	N.P.	Superior Oil Corp.	....	Dec. 20, 20	18,900	6¾	6¾	†6	6⅛	— ⅝
74¾	50	68½	57¼	$211,082,925	$25	The Texas Corp.	75cQ	July 1, 29	34,700	61¼	61⅜	59¾	60	— 1¼
26⅝	12⅛	23⅞	15⅛	8,380,340	10	Texas Pacific Coal & Oil.	2½%s	June 30, 29	19,500	15⅞	17⅜	15⅛	16½	+ ½
41½	19⅝	38½	27⅛	(sh) 2,179,275	N.P.	Tide Water Oil Co.	20cQ	June 30, 29	500	34	34	32¼	32¼	— 2¼
100⅛	86⅜	97½	89¾	$20,321,000	$100	do 5½% pfd.	$1.25Q	Aug. 15, 29	400	92	92	90⅞	90⅞	— 1⅝
25	14¾	23½	17½	(sh) 4,877,976	N.P.	Tide Water Associated.	....	Aug. 1, 27	23,000	18½	18⅞	17⅜	17⅞	— 3⅜
91¾	81⅞	90⅛	84	$72,989,200	$100	do pfd.	$1.50Q	July 1, 29	3,400	88¾	89¾	88	89¾	— ⅜
14½	6¾	13	9	(sh) 3,842,029	N.P.	Transcontinental Oil.	....	.....	8,800	11⅝	12¼	11	11	— ½
58	42¾	54½	45¾	$40,858,375	$25	Union Oil of California.	50cQ	Aug. 10, 29	4,600	47¼	47¼	†45¾	45¾	— 1½
128⅛	110	152	121⅞	31,101,200	100	Union Tank Car Co.	$1.25Q	June 1, 29	4,200	149	157½	149	150	+ 2
44⅞	26	42⅞	28½	(sh) 488,359	N.P.	Warner Quinlan.	50cQ	July 2, 29	4,900	30⅜	30⅜	29⅛	29⅝	— ⅝
38	20⅛	37⅞	30¼	(sh) 490,000	N.P.	White Eagle Oil & Refining.	50cQ	July 20, 29	2,100	32½	33	32½	32¾	— ½
22⅛	17¼	29¾	17⅞	(sh) 428,967	N.P.	Wilcox Oil & Gas.	....	May 10, 28	1,400	20	20	18⅝	18⅝	— ⅜

•New High †New Low XEx-dividends ‡Also extras s-Stock Total Sales 978,608

Pittsburgh Stock Exchange

Transactions Week Ended Aug. 9, 1929

	Sales	High	Low	Last	Change
Ark. Nat. Gas...	6,095	16	14¾	14¾	—1¼
do pfd.....	2,080	8⅛	8	8⅛	0
Columbia Gas....	100	92	92	92	....
Devonian Oil....	2,742	12	9¾	12	+2
Dixie Gas & Util..	7,820	*23½	20	23½	+3½
Lone Star Gas....	15,772	*44	38¾	41	+2¼
Phoenix Oil pfd...	7,900	.55	.50	.50	0
Plymouth Oil....	710	24½	22⅞	24	0
Rights					
Lone Star.....	1,574	8	7½	7¾	+ ½

*New high

Resumes Fight Against Red Hat Emblem

WASHINGTON, Aug. 12.—The Standard Oil Co. of Indiana, has renewed its fight against the trade mark of the Independent Oil Men of America—the red hat—claiming that, notwithstanding the elimination of concentric rings around the hat, the mark conflicts with its red crown mark. The case has been resumed in the patent office on account of new publication by the Independents, of the revised red hat mark.

The Independents have not yet answered the representations of the Standard, so far as the attorneys for the Standard had been advised at the time this was written.

Refiners Oil Buys Brox Stations

CLEVELAND, Aug. 13.—The Refiners Oil Co. of Dayton, has taken over properties of the Brox Oil Co. of Shelby, O. The Brox interests operated bulk stations at Marion, Bellevue, Sugar Creek, Bucyrus, Shelby and Norwalk, O., as well as service stations and tank routes.

Announcement of the purchase by the Refiners was made this week by W. E. Talbot, general manager.

Cleveland Stock Market

Aug. 9	Par Value	Bid	Asked
Canfield Oil Co.	$100	...	149
do pfd.	100	103	...
Fred G. Clark.	10	11½	12¾
National Refining.	25	33	34
do pfd.	100	...	135
Paragon Refining.	25	18	22½
do pfd.	N.P.	..	42½
do ctfs.	..	18	20

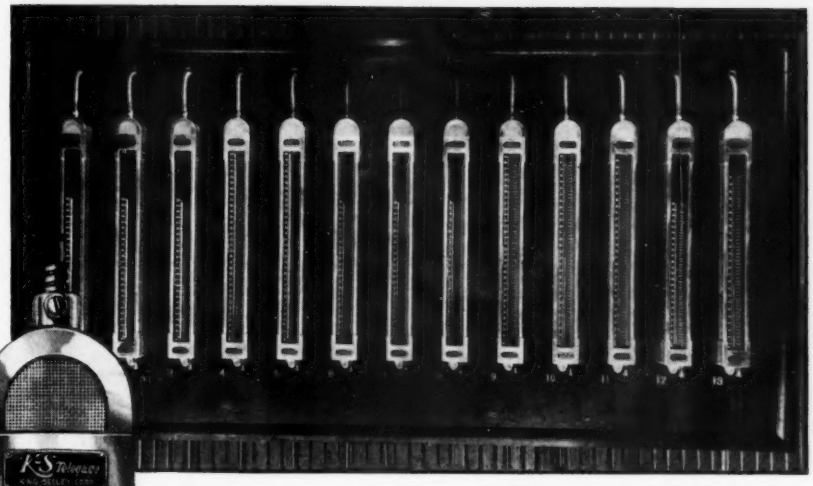
Pittsburgh Curb Market

Transactions Week Ended Aug. 9, 1929

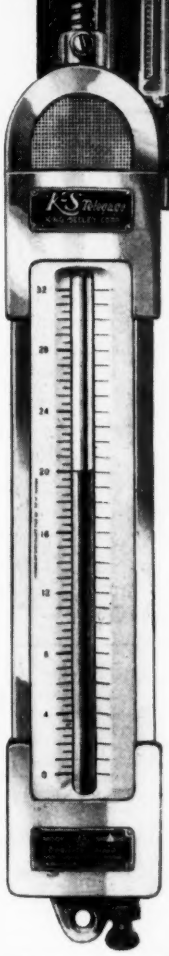
	Sales	High	Low	Last	Change
Ark. Gas "A"....	4,020	16	14⅞	14⅞	—1⅛
Phoenix Oil pfd...	4,200	.50	.50	.50	+.15

To Buy American Grease Plant

JACKSON, Mich., Aug. 10.—A. J. Callaghan has completed arrangements to purchase the grease plant of the American Oil Corp. located on Belden road at Jackson. The purchase price for real estate, equipment, inventory and good will is to be about $75,000.



Battery of thirteen Telegages on instrument board of Peerless Oil Co., Elyria, Ohio, used for checking contents of large gasoline storage tanks.



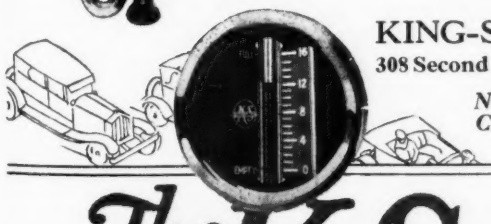
Don't Ask Your Men to Take This Risk

MORE than one accident has caused loss of life or limb while measuring the contents of storage tanks in wet and slippery weather.

No longer need superintendents of tank yards risk the safety of their men by sending them out with the old-fashioned measuring tape or stick. The modern and safe way is to measure your tanks with a battery of K-S Telegages at a central control point. In this practical, safe and efficient way the modern manager keeps a perpetual inventory of his stock of valuable petroleum products, obtaining at a glance, the volume of each tank, checking errors, and guarding against production losses, and "delivery leaks."

Write for complete information, giving a full description of your requirements. Give the Baume or Specific Gravity of each liquid to be measured, the distance from tank to desired location of gauge, and size of tank. Descriptive folder sent on request.

Approved by Underwr ters' Laboratories



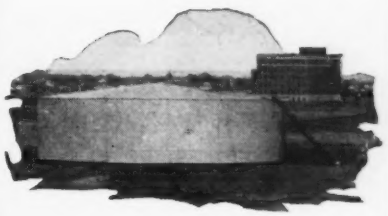
KING-SEELEY CORPORATION
308 Second Street ANN ARBOR, MICHIGAN

New York: 44 Murray St.
Chicago: 471 Wrigley Bldg.

The K-S Telegage

BE CERTAIN WITH THE *K—S TELEGAGE*

Standard factory equipment on three-fourths of all cars selling for $700 or more.



Fuel Oil Tanks

Adequate storage capacity for fuel oil is convenient and economical. It eliminates dependence on uncertain deliveries and allows you to take advantage of price variations. The tank illustrated has a capacity of 80,000 barrels. We build all standard field-erected tank capacities, as well as special sizes to meet individual needs.

Ask our nearest office for our booklet on oil storage tanks or prices on tanks you contemplate installing.

Chicago Bridge & Iron Works

Chicago	2125 Old Colony Bldg.
New York	3145 Hudson Terminal Bldg.
Cleveland	2206 Union Trust Bldg.
Dallas	3339 Magnolia Bldg.
Atlanta	1050 Healey Bldg.
San Francisco	1060 Rialto Bldg.

DON'T DIVIDE HIS BUSINESS WITH A COMPETITOR

Concentrate all his purchases in your stations by selling him a handy, convenient coupon book.

A coupon book brings him back again and again—creates a bond of friendship. He's your customer indefinitely. Write us for complete information on Allison Coupon Books. They're accurate, neat and well made, yet cost no more.

ALLISON COUPON CO.
INDIANAPOLIS, INDIANA
SINCE 1888

Standard Oil Stocks on New York Curb

1928 High	1928 Low	1929 High	1929 Low	Outstanding Capital	Par Value	Stocks	Div. Rate	Last Paid	Transactions Week Ended Aug. 10 Sales	First	High	Low	Last	Change
22⅜	14⅞	18¾	14¼	£4,126,460	£ 1	Anglo-American Oil	36c	June 5, 29						
21¼	15	18	13	.....	....	do certificates	36c	June 5, 29	200	15	15	14⅝	14⅞	+ ⅛
20½	14⅜	17	13	.....	L 1	do cts. non-voting	36c	June 5, 29	100	13	13	13	13	0
5	1¼	2⅜	1⅛	(sh) 500,000	N.P.	Atlantic Lobos	.....	.....	.....	.....	.....	.....	.....	.....
9¾	3¼	4⅛	1½	$10,000,000	$50	do pfd	.....	.....	.....	.....	.....	.....	.....	.....
56	44½	46½	28¼	$1,000,000	25	Borne-Scrymser	‡$1S.A.	Apr. 15, 29	250	30½	30½	†28¼	28¼	— 2¼
76	58	74¼	58⅜	10,000,000	50	Buckeye Pipe Line	‡$1Q	June 15, 29	100	69	69	69	69	0
161	117¼	193⅜	140⅛	3,000,000	25	Chesebrough Mfg	‡$1Q	June 30, 29	200	177¼	184¾	177¼	184¾	+ 7¾
23	16	29	17⅛	36,123,350	10	Continental Oil	.....	Dec. 15, 27	4,000	17½	17¾	17	17⅛	— ⅜
17½	9½	11⅜	7⅜	.....	N.P.	Creole Petroleum	.....	.....	28,200	8⅜	8⅞	8⅛	8⅜	+ ¼
82	67	75¾	62	1,500,000	50	Cumberland Pipe Line	$1Q	June 15, 29	150	63	66¾	63	66¾	+ 3
88	64⅛	70½	56	5,000,000	100	Eureka Pipe Line	$1Q	Aug. 15, 29	50	59	59	59	59	0
13	4¼	6⅝	5	16,000,000	100	Galena Signal Oil	.....	June 30, 25	.....	.....	.....	.....	.....	.....
86	26	90	73½	4,000,000	100	do new pfd	....	June 30, 26	.....	.....	.....	.....	.....	.....
89¾	35	88	73½	2,000,000	100	do old pfd	.....	June 30, 26	.....	.....	.....	.....	.....	.....
114¾	59¼	126⅞	89⅝	73,685,700	25	Humble Oil & Refining	‡30cQ	July 1, 29	6,800	119	119	115¼	117	— 2
290½	176½	340½	285	20,000,000	100	Illinois Pipe Line	$10S.A.	June 15, 29	800	300⅛	305	300⅛	300¼	— 5
104	56¾	119⅝	88	(sh) 6,605,442	N.P.	Imperial of Canada	12½cQ	June 1, 29						
						do new			9,800	29	29⅛	28¼	28¾	— ½
91⅞	74⅝	106½	81¼	$5,000,000	$50	Indiana Pipe Line	‡$1Q	Aug. 15, 29						
						do new			2,800	28½	28⅝	28	28	— ½
55	35	65½	46⅛	(sh) 7,123,544	N.P.	International Petroleum	12½c	June 25, 29						
						do new			8,400	25¾	25¾	24	24¼	— 1⅝
32⅜	19⅜	25⅞	21⅜	$6,363,350	12.50	National Transit Co	25cQ	June 15, 29	2,600	22⅛	22¼	22	22¼	+ ⅛
75	38½	85	72	5,000,000	100	New York Transit	....	July 15, 26						
						do new			500	15¼	15¼	15¼	15¼	0
69	56½	63	52	2,000,000	50	Northern Pipe Line	$2S.A.	July 1, 29	100	57	57	57	57	+ 3
83½	58½	75⅝	64⅛	60,000,000	25	Ohio Oil Co	50cQ	June 15, 29	700	70⅛	70⅛	67½	69½	— ½
84	28	44½	23⅜	10,000,000	25	Penn Mex. Fuel	75c	Dec. 16, 28	100	33	33	33	33	— 1⅜
220	167	50	36⅝	4,000,000	25	Solar Refining	$1.25S.A.	June 20, 29	100	37⅞	37⅞	37⅞	37⅞	0
19	12	22½	13	1,000,000	10	Southern Pipe Line	$1	Mar. 1, 29	300	21	21¼	21	21¼	+ ¼
71⅞	36¾	60¼	40⅜	30,000,000	25	South Penn Oil	50cQ	June 30, 29	2,100	50	50	46¼	48	— 2
102	70	70	62¾	1,750,000	50	South West Pa. Pipe Lines	$1	July 1, 29	150	63	64	63	64	— 1¾
95⅞	70⅞	103¼	51½	348,175,069	25	S. O. Indiana	62½cQ	June 15, 29	63,500	55⅛	55⅛	†51½	53	— 1½
27¾	15	21⅜	18	8,000,000	25	S. O. Kansas	....	June 16, 24	1,400	20⅜	22⅛	20⅜	22	+ 1½
49	44	45¼	35⅛	25,654,516	10	S. O. Kentucky new	40cQ	June 30, 29	4,600	36⅞	36⅞	35⅝	35⅝	— 1
54⅝	39⅞	50¾	45½	4,649,225	25	S. O. Nebraska	‡62½cQ	June 20, 29	500	49½	49½	49	49	— ¼
134	71	129	110¼	14,000,000	25	S. O. Ohio	62½cQ	July 1, 29	450	117	117	116½	117	+ ½
125	116	124½	115	7,000,000	100	do pfd	$1.75Q	June 1, 29	30	117½	117½	116	116	— 1
23½	16	18	14	861,466	25	Swan Finch Co	30c	Jan. 15, 29	.....	.....	.....	.....	.....	.....
111	72	133¾	105½	126,154,000	25	Vacuum Oil	$1Q	June 20, 29	4,100	118⅝	119⅞	115⅛	116	— 4

*New High †New Low ‡Also Extras

Independent Oils on New York Curb

1928 High	1928 Low	1929 High	1929 Low	Par Value	Stocks	Transactions Week Ended Aug. 10 Sales	First	High	Low	Last	Change
1½	.53	.72	.375	$ 5	Amer. Cons. Oilfields	1,200	⅜	1/16	⅜	⅜	0
9½	3½	8⅝	3½	N.P.	Amer. Maracaibo	1,400	3⅞	4	3½	3½	— ¼
4½	2¼	5	1⅞	$ 10	Argo Oil	500	2	2	1⅞	1⅞	— ⅛
3¾	3⅜	17⅞	3¾	N.P.	Arkansas Nat. Gas	28,400	16⅜	16⅜	14⅝	15⅜	— ⅞
....	....	17⅜	6¾	N.P.	do A	33,900	16	16¼	14⅝	15⅛	— 1
....	....	9	7⅞	10	do pfd	600	8⅛	8⅛	8⅛	8⅛	0
55	32¾	62	50	N.P.	British American Oil	.....	.....	.....	.....	.....	.....
23⅞	3¾	4⅞	2⅜	25c	Carib Syndicate	2,500	3¼	3½	3⅜	3⅜	+ ⅛
....	....	48½	27¾	N.P.	Cities Service new	14,400	46⅝	46¾	44⅝	46	— ⅞
103½	94½	98½	88⅜	100	do pfd	1,200	93½	93⅞	93½	93⅞	0
9⅝	8⅞	9¼	8⅞	10	do pref. B	200	9	9	9	9	0
97	88½	96	90	100	do pref. BB	100	90	90	†90	90	0
2¼	1	1½	⅝	1	Colombia Syndicate	1,200	7/8	1	7/8	1	+ ¼
17¾	9¾	15	6	N.P.	Colon Oil	800	7⅝	8	7½	7⅝	+ ⅛
8⅞	6¼	11⅛	4⅞	10	Consolidated Royal	100	6	6	5½	5⅞	+ ⅛
....	....	96⅞	45	N.P.	Cosden Oil Co	1,900	91	91	84	89¼	— 1¼
....	....	80	71	....	do pfd	.....	.....	.....	.....	.....	.....
3¼	.76	2½	1⅛	N.P.	Crown Central	300	1⅜	1½	1⅜	1⅜	0
15	6¾	11¾	8	N.P.	Crystal Oil	.....	.....	.....	.....	.....	.....
50	48	51⅛	51⅛	$100	do pfd	.....	.....	.....	.....	.....	.....
33½	8⅛	26	12½	N.P.	Darby Petroleum	1,200	13	13	†12½	13	— ¼
2⅞	1	10⅞	2	N.P.	Derby Oil & Refining	4,000	8⅜	8⅜	6⅝	6⅝	— 1
21⅛	7½	44	20⅞	N.P.	do pfd	.....	.....	.....	.....	.....	.....
165	101⅜	202⅞	142⅛	$25	Gulf Oil Corp	11,200	183	191⅞	181	187⅞	+ 7⅜
7½	5¾	7½	3⅝	5	Homaokla Oil	2,400	4⅛	4⅜	4⅛	4⅜	— ⅜
3⅜	1	2⅞	1¼	10	Intercontinental Pet	6,800	1⅜	1⅜	1⅛	1¼	— ⅛
3	⅛	3⅜	1½	N.P.	Kirby Petroleum	2,800	2⅜	2⅜	2	2¼	— ¼
9⅛	5⅛	6⅛	2⅞	N.P.	Leonard Oil & Dev	4,800	4¾	5	3½	4	— 1
43⅛	20	38¾	24¾	N.P.	Lion Oil & Refg	80	30¼	30¼	30	30	— 2⅝
69⅛	48⅛	87	67	$25	Lone Star Gas	.....	.....	.....	.....	.....	.....
....	....	44	32¼	....	do new	2,800	39⅛	*44	39⅛	41½	+ 3
1⅞	.50	1¼	⅝	1	Magdalena Syndicate	1,200	⅜	1/16	⅜	⅜	0
48½	32	38½	21¾	N.P.	Margay Oil	900	22	22	22	22	+ ⅛
8	2¾	6⅝	3	N.P.	Mexico-Ohio Oil	.....	.....	.....	.....	.....	.....
....	....	42	15⅞	N.P.	Missouri-Kan. P. L	3,800	35⅝	35⅝	31⅜	32⅞	— 2½
1¾	.76	1⅛	⅞	1	Mountain & Gulf	1,900	⅞	1	⅞	1	+ ⅛
28⅜	19½	22⅞	11⅛	10	Mountain Producers	1,800	12	12	†11⅛	11¼	— ¾
....	....	43⅞	24¾	N.P.	Nat. Fuel Gas (new)	9,400	43⅞	*43⅞	35½	38	— ⅝
5½	4¼	5	3	5	New Bradford	200	3¼	3¼	†3	3	— ¼
5½	3	3½	3	10	New England Fuel	.....	.....	.....	.....	.....	.....
11⅞	7⅛	9⅝	5½	1	New Mex. & Ariz	.....	.....	.....	.....	.....	.....
15½	11½	24½	16	25	New York Petrol	200	19	19⅜	17⅞	17⅞	— ⅜
13¼	8⅛	18½	8¾	N.P.	North Cent. Texas	900	17⅞	*18½	16	16	— 1¾
....	....	19¼	12½	N.P.	Oil Stock, Ltd. A	500	13⅜	13⅞	†12½	13⅛	— ⅜
....	....	18¼	14⅛	N.P.	do B	.....	.....	.....	.....	.....	.....
26¼	20	23¼	14½	N.P.	Pacific Western Oil	700	15¼	15½	†14½	15	— ¼
6	2¼	3½	1	N.P.	Pandem	200	1⅛	1⅛	1	1⅛	— ⅛
15⅝	8½	10¼	5⅞	N.P.	Pantapec	200	5⅞	6	†5⅞	5⅞	— ⅛
20	10⅝	25½	22½	$25	Paragon Refg. B. ctfs	.....	.....	.....	.....	.....	.....
7¾	4⅞	7⅜	4⅜	$10	Pennok Oil	.....	.....	.....	.....	.....	.....
....	....	34½	25½	N.P.	Petroleum Corp	4,500	26⅞	27¼	†25½	25¾	— 1½
5⅜	3⅛	....	....	$ 5	Pittsburgh Oil & Gas	.....	.....	.....	.....	.....	.....
31⅜	26½	30	22	N.P.	Plymouth Oil	300	23½	24	23⅜	23⅜	— ⅞
18	8	16	11	25	Red Bank Oil	100	11	11	11	11	0
13	4⅛	8½	4½	N.P.	Reiter-Foster	1,000	5⅝	5⅝	4⅞	4⅞	0
31½	23¼	25½	23⅞	$25	Richfield pfd	100	24¼	24¼	24¼	24¼	+ ¼
....	....	29	23	....	Root Refining pfd	100	24½	24½	24½	24½	0
12	4⅝	11	5½	N.P.	Ryan Consolidated	200	5⅞	5⅞	†5½	5⅝	— 3/8
7¼	5½	5⅞	2	$10	Salt Creek Cons	300	2¾	2¾	†2	2	— 1⅛
35	23¼	25⅞	13⅛	10	Salt Creek Prod	500	14½	14½	†13⅛	13⅛	— 1⅜
3⅛	1	2½	1	5	Savoy Oil	.....	.....	.....	.....	.....	.....
40	27	33⅛	32	25	Shreveport El Dorado	.....	.....	.....	.....	.....	.....
....	....	24	15¼	N.P.	Southland Royalty	700	15½	16¼	†15¼	15¼	— ¾
....	....	23	12⅝	N.P.	Texon Oil & Land new	400	13⅛	13⅜	13⅛	13⅛	0
22⅛	13	16⅛	11⅝	$10	Tidal Osage	.....	.....	.....	.....	.....	.....
21¼	13⅛	16½	10⅝	10	do not-voting	.....	.....	.....	.....	.....	.....
93¾	75	146⅛	80	100	Transcontinental pfd	100	146⅛	*146⅛	146⅛	146⅛	+ 1⅛
74⅛	18	71½	66	10	Venezuela-Mexico	.....	.....	.....	.....	.....	.....
9⅜	4¾	6½	3	5	Venezuelan Petrol	1,300	3	3½	†3	3¼	— ¼
8¼	4⅞	9⅛	4⅜	1	Woodley Petroleum	200	4¼	4¼	4¼	4¼	0
⅝	⅜	5⅝	1	25	Y Oil & Gas	.....	.....	.....	.....	.....	.....

*New High †New Low

New York Curb Bonds

Week Ending Aug. 9, 1929

	High	Low	Last	Change
Cities Serv. 5s '66	87½	83⅝	84½	—5½
Cities Serv. G. 5½s '42	87½	86¾	87½	+3
Cities Serv. G. P. 6s '43	93½	92¾	92¾	— ¾
Cont. Oil 4½s '37	94	92½	93	+1
Empire O & R 5½s '42	87½	86⅝	87	— ¾
Gulf Oil 5s '37	99¾	98⅛	98¼	— ½
Gulf Oil 5s '47	99⅞	99⅜	99⅜	— ¼
Indep. Oil 6s '39	105⅞	104	104	—1
Richfield Oil 6s '44	100⅝	99½	99¾	— ¾
Sun Oil 5½s '39	100	99	100	+ ½

Oil Dividends

	Amount	Payable	Stock of Record
Atlantic Refining q	25c	Sept. 15	Aug. 25
do extra	25c	Sept. 15	Aug. 25
Imperial Oil q	12½c	Sept. 2	Aug. 15
N. Y. Transit init. new	40c	Oct. 15	Sept. 20
Plymouth Oil	50c	Aug. 31	Aug. 19
Reiter-Foster initial	10c	Sept. 1	Aug. 15
S. O. Indiana q	62½c	Sept. 16	Aug. 16
S. O. California q	62½c	Sept. 16	Aug. 15
S. O. Nebraska q	62½c	Sept. 20	Aug. 24
do extra	25c	Sept. 20	Aug. 24
S. O. New York q	40c	Sept. 16	Aug. 16
Sun Oil q	25c	Sept. 16	Aug. 26
Texas Pacific stock	2½c	Sept. 30	Sept. 5
Union Tank Car q	$1.25	Sept. 3	Aug. 17
Vacuum Oil q	$1	Sept. 20	Aug. 31

New York Bonds

Week Ending Aug. 9, 1929

	High	Low	Last	Change
Assoc. Oil Gold 6s	102⅛	101¾	102	0
Atlantic Refg. deb. 5s	101¾	100½	101¼	+ ¾
Cal. Pet. 5s	94⅛	93	93	—1
Cal. Pet. 5½s	98	97¼	98	+1
General Asphalt 6s	106½	105	105	0
General Pet. 5s	100½	100¼	101⅜	+1⅛
Humble Oil & Refg. 5s	100⅛	99½	100	— ⅜
Humble Oil & Refg. 5½s	100⅞	100¼	100⅝	0
Pan Amer. P & T 7s	104½	103½	104½	0
Pan Amer. P & T 6s	107½	106	106⅜	—1⅛
Pan Amer. P & T 6s	98½	97½	97¾	0
Phillips Pet. 5¼s	89¾	88	88	0
Pure Oil 5½s	98⅛	97½	97⅞	—1⅝
Shell Union Oil 5s	96½	95	95	— ½
Simms Pet. 6s	99½	99½	99½	0
Sinclair Con. Oil 7s	101⅞	101	101⅛	0
Sinclair Con. Oil 6½s	100	99⅛	100	+ ⅞
Sinclair Con. Oil 6s D	99	98⅛	98⅛	— ⅞
SinclairCon.OilCrude5½s	96	94¼	95¼	0
Sinclair Pipeline	94	92⅞	93½	0
Skelly Oil 5½s	91	90	90	—1
S. O. N. Y. 4½s	95	94½	94½	— ½
S. O. N. J. 5½s	102	101	101¾	+ ¾
Union Oil of Calif. 6s A	106	105½	105½	— ½
Union Oil of Calif. 5s C	96	96	96	— ½
White Eagle Oil 5½s	101	100	100	0

(*Continued from Page* 138)

companies. A card from G. V. Holton, secretary of Vacuum, which was sent stockholders this week, reads:

"Our attention has been called to circulars from stockbrokers addressed 'To the Stockholders of Vacuum Oil Company.' These circulars usually extend an invitation to participate in an offering of stock of some other oil company.

"We wish to advise that the Vacuum Oil Co. is in no way interested in and has no connection with any of the companies whose stock is thus offered. Any communication that the Vacuum Oil Co. may have to make to its stockholders will be addressed to them by the company itself."

Financial Notes

Superior Oil Corp.—Stockholders have approved the plan to decrease number of capital shares by issuing one new share for each three outstanding. The company will now have 776,979 shares outstanding and 1,623,021 shares authorized but unissued. New stock will be exchanged for old stock Aug. 16 and thereafter. New shares have been listed on the New York Stock Exchange.

Gilmore Oil Co.—Rights have been given stockholders of July 15 record to subscribe for one new share at $12 for each block of 20 shares held that date. Rights expire Aug. 12.

New York Transit Co.—The initial dividend on the new $10 par stock is 40 cents, payable Oct. 15 to stock of record Sept. 20.

Simms Petroleum Co.—This company has acquired approximately 94 per cent of the capital stock of the Pennok Oil Corp. through exchange of shares.

Shelly Oil Co.—This company's production of natural and refined gasoline in June amounted to 15,327,851 gallons, as compared with 13,779,079 gallons in June, 1928. Production of lubricating oils and greases increased 28 per cent to 429,129 gallons. Sales of refined products were reported to have been 23 per cent larger than a year before.

Transcontinental Oil Co.—Production of crude in the five months ended May 31 totaled 3,501,516 barrels as compared with 1,906,457 barrels in the corresponding time of 1928. Most of the crude came from the Yates pool.

DETROIT, Aug. 10.—For five consecutive months, ended with July, new records for gasoline sales were set by the White Star Refining Co. In March, April, May, June and July the company's sales were the highest for all time, and exceed that of the month previous. Full page space was used in a Detroit newspaper Aug. 8 to tell the public of its record.

THE OIL INDUSTRY EXCHANGE

Positions Wanted

SALES EXECUTIVE DESIRES CHANGE. Outstanding ability, mature judgment, commanding personality. Ten years experience with my present connection marketing refined oil, gasoline, fuel oils, lubricating oils and specialty products, same being a major company. Can formulate policies and carry them out. Can inspire loyalty among salesmen and secure maximum results. Best of reasons for desiring a change. Address Box 395.

TECHNICAL GRADUATE desires position as chief engineer or assistant with oil or large tire company. Seven years experience design, construction and maintenance of service stations, bulk plants, and ocean terminals. Address Box 398.

EXECUTIVE

Familiar with marketing, operation of bulk and retail stations, training of salesmen, financing, purchasing, etc., will be available September 1st.

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